



**Modulight, Inc.**

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## **RoHS COMPLIANCE STATEMENT**

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## 1 SCOPE

This statement clarifies Modulight's product compliance with the European Union's directive 2002/95/EC, Restrictions of Hazardous Substances ("RoHS" directive) and similar regulations that may be adopted by other countries.

RoHS directive becomes valid on Jul 1 2006 in the member states of European Union. It states that all new electrical and electronic equipment put on the market within the member states must not contain certain hazardous materials.

## 2 RESTRICTED (RoHS) MATERIALS

Quantity limit 0.1% of weight (1000ppm) of any homogeneous material:

1. Lead (Pb)
2. Mercury (Hg)
3. Hexavalent Chromium (Cr VI)
4. Flame retardants Polybrominated Biphenyls (PBB) and Polybrominated Diphenyl Ethers (PBDE)

Quantity limit 0.01% of weight (100 ppm) of any homogeneous material:

1. Cadmium (Cd)

'Homogeneous material' means a material that cannot be mechanically disjointed into different materials by, for example unscrewing, cutting, crushing, grinding and abrasive processes. Homogeneous is further defined as "of uniform composition throughout".

## 3 EXEMPTIONS

Following cases are exempted from the requirements:

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.
2. Mercury in straight fluorescent lamps for general purposes not exceeding:
  - halophosphate 10 mg
  - triphosphate with normal lifetime 5 mg
  - triphosphate with long lifetime 8 mg.
3. Mercury in straight fluorescent lamps for special purposes.
4. Mercury in other lamps not specifically mentioned in this Annex.
5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.
6. Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminium containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight.
7. — Lead in high melting temperature type solders (i.e. tin-lead solder alloys containing more than 85 % lead),
  - lead in solders for servers, storage and storage array systems (exemption granted until 2010),
  - lead in solders for network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunication,
  - lead in electronic ceramic parts (e.g. piezoelectronic devices).



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8. Cadmium plating except for applications banned under Directive 91/338/EEC <sup>(1)</sup> amending Directive 76/769/EEC <sup>(2)</sup> relating to restrictions on the marketing and use of certain dangerous substances and preparations
  9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators.
  10. Within the procedure referred to in Article 7(2), the Commission shall evaluate the applications for:
    - Deca BDE,
    - mercury in straight fluorescent lamps for special purposes,
    - lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications (with a view to setting a specific time limit for this exemption), and
    - light bulbs,as a matter of priority in order to establish as soon as possible whether these items are to be amended accordingly.

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<sup>1</sup> OJ L 186, 12.7.1991, p. 59.

<sup>2</sup> OJ L 262, 27.9.1976, p. 201.



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#### 4 LIST OF COVERED PRODUCTS

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1000	1310 nm FP laser diode chip for 2.5 Gb/s applications, 7 mW output power	YES	
ML1001	1310 nm DFB laser diode chip for 2.5 Gb/s applications, 7 mW output power	YES	
ML1002	1310 nm DFB laser diode chip for 10 Gb/s applications, 10 mW output power	YES	
ML1005	1490 nm DFB laser diode chip for 2.5 Gb/s applications, 6 mW output power	YES	
ML1006	1550 nm DFB laser diode chip for 2.5 Gb/s applications, 3 mW output power	YES	
ML1007	1550 nm FP laser diode chip for 2.5 Gb/s applications, 5 mW output power	YES	
ML1010	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1011	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1012	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1013	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1014	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1015	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, no flange	YES	5
ML1016	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, no flange	YES	5
ML1017	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1018	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1019	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, no flange	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1020	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1021	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1022	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1023	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1024	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1025	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, no flange	YES	5
ML1026	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, no flange	YES	5
ML1027	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1028	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1029	1310 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, no flange	YES	5
ML1030	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 1, without isolator, horizontal flange	YES	5
ML1031	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 1, without isolator, no flange	YES	5
ML1032	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 1, with isolator, horizontal flange	YES	5
ML1033	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 1, with isolator, no flange	YES	5
ML1034	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 2, without isolator, horizontal flange, M1407	YES	5
ML1035	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 2, without isolator, no flange, M1407	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1036	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 2, with isolator, horizontal flange, M1407	YES	5
ML1037	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 2, with isolator, no flange, M1407	YES	5
ML1038	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 3, without isolator, horizontal flange	YES	5
ML1039	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 3, without isolator, no flange	YES	5
ML1040	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 3, with isolator, horizontal flange	YES	5
ML1041	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 3, with isolator, no flange	YES	5
ML1042	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 4, without isolator, horizontal flange	YES	5
ML1043	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 4, without isolator, no flange	YES	5
ML1044	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 4, with isolator, horizontal flange	YES	5
ML1045	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, pin layout 4, with isolator, no flange	YES	5
ML1046	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 1, without isolator, horizontal flange	YES	5
ML1047	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 1, without isolator, no flange	YES	5
ML1048	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 1, with isolator, horizontal flange	YES	5
ML1049	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 1, with isolator, no flange	YES	5
ML1050	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 2, without isolator, horizontal flange, M1407	YES	5
ML1051	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 2, without isolator, no flange, M1407	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1052	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 2, with isolator, horizontal flange, M1407	YES	5
ML1053	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 2, with isolator, no flange, M1407	YES	5
ML1054	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 3, without isolator, horizontal flange	YES	5
ML1055	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 3, without isolator, no flange	YES	5
ML1056	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 3, with isolator, horizontal flange	YES	5
ML1057	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 3, with isolator, no flange	YES	5
ML1058	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 4, without isolator, horizontal flange	YES	5
ML1059	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 4, without isolator, no flange	YES	5
ML1060	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 4, with isolator, horizontal flange	YES	5
ML1061	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, pin layout 4, with isolator, no flange	YES	5
ML1062	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 1, without isolator, horizontal flange	YES	5, 6
ML1063	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 1, without isolator, no flange	YES	5, 6
ML1064	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 1, with isolator, horizontal flange	YES	5, 6
ML1065	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 1, with isolator, no flange	YES	5, 6
ML1066	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 2, without isolator, horizontal flange, M1407	YES	5, 6
ML1067	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 2, without isolator, no flange, M1407	YES	5, 6



Sales part	Description	RoHS compliant	Exemption clause (s)
ML1068	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 2, with isolator, horizontal flange, M1407	YES	5, 6
ML1069	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 2, with isolator, no flange, M1407	YES	5, 6
ML1070	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 3, without isolator, horizontal flange	YES	5, 6
ML1071	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 3, without isolator, no flange	YES	5, 6
ML1072	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 3, with isolator, horizontal flange	YES	5, 6
ML1073	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 3, with isolator, no flange	YES	5, 6
ML1074	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 4, without isolator, horizontal flange	YES	5, 6
ML1075	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 4, without isolator, no flange	YES	5, 6
ML1076	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 4, with isolator, horizontal flange	YES	5, 6
ML1077	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, pin layout 4, with isolator, no flange	YES	5, 6
ML1078	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 1, without isolator, horizontal flange	YES	5, 6
ML1079	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 1, without isolator, no flange	YES	5, 6
ML1080	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 1, with isolator, with flange	YES	5, 6
ML1081	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 1, with isolator, no flange	YES	5, 6
ML1082	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 2, without isolator, horizontal flange, M1407	YES	5, 6
ML1083	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 2, without isolator, no flange, M1407	YES	5, 6

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1084	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 2, with isolator, horizontal flange, M1407	YES	5, 6
ML1085	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 2, with isolator, no flange, M1407	YES	5, 6
ML1086	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 3, without isolator, horizontal flange	YES	5, 6
ML1087	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 3, without isolator, no flange	YES	5, 6
ML1088	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 3, with isolator, horizontal flange	YES	5, 6
ML1089	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 3, with isolator, no flange	YES	5, 6
ML1090	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 4, without isolator, horizontal flange	YES	5, 6
ML1091	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 4, without isolator, no flange	YES	5, 6
ML1092	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 4, with isolator, horizontal flange	YES	5, 6
ML1093	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, pin layout 4, with isolator, no flange	YES	5, 6
ML1094	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 1, without isolator, horizontal flange	YES	5
ML1095	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 1, without isolator, no flange	YES	5
ML1096	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 1, with isolator, horizontal flange	YES	5
ML1097	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 1, with isolator, no flange	YES	5
ML1098	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 2, without isolator, horizontal flange, M1407	YES	5
ML1099	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 2, without isolator, no flange, M1407	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1100	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 2, with isolator, horizontal flange, M1407	YES	5
ML1101	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 2, with isolator, no flange, M1407	YES	5
ML1102	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 3, without isolator, horizontal flange	YES	5
ML1103	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 3, without isolator, no flange	YES	5
ML1104	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 3, with isolator, horizontal flange	YES	5
ML1105	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 3, with isolator, no flange	YES	5
ML1106	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 4, without isolator, horizontal flange	YES	5
ML1107	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 4, without isolator, no flange	YES	5
ML1108	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 4, with isolator, horizontal flange	YES	5
ML1109	1310 nm FP fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, no connector, pin layout 4, with isolator, no flange	YES	5
ML1110	1490 nm DFB laser diode chip for 2.5 Gb/s applications, 10 mW output power	YES	
ML1111	800 nm FP laser diode chip, high power	YES	
ML1112	900 nm FP laser diode chip, high power	YES	
ML1113	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1114	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1115	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1116	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1117	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1118	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, no flange	YES	5
ML1119	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, no flange	YES	5
ML1120	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1121	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1122	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, no flange	YES	5
ML1123	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1124	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1125	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1126	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1127	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1128	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, no flange	YES	5
ML1129	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, no flange	YES	5
ML1130	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1131	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1132	1310 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, no flange	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1133	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, with isolator, horizontal flange	YES	5
ML1134	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/PC connector, with isolator, no flange	YES	5
ML1135	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, with isolator, horizontal flange	YES	5
ML1136	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, SC/APC connector, with isolator, no flange	YES	5
ML1137	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, with isolator, horizontal flange	YES	5, 6
ML1138	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/PC connector, with isolator, no flange	YES	5, 6
ML1139	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, with isolator, horizontal flange	YES	5, 6
ML1140	1550 nm DFB fiber pigtailed module for 2.5 Gb/s applications, 2 mW output power, FC/APC connector, with isolator, no flange	YES	5, 6
ML1141	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1142	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1143	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1144	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1145	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1146	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, no flange	YES	5
ML1147	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, no flange	YES	5
ML1148	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, no flange	YES	5, 6

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1149	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1150	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, no flange	YES	5
ML1151	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1152	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1153	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1154	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1155	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1156	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, no flange	YES	5
ML1157	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, no flange	YES	5
ML1158	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1159	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1160	1550 nm DFB fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, no flange	YES	5
ML1210	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 3	YES	5
ML1211	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 3	YES	5
ML1212	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 3	YES	5
ML1213	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, ball lens, pin layout 3	YES	5
ML1214	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 2	YES	5
ML1215	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 3	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1216	1430 nm FP TO-can for 1.25 Gb/s applications, 3 mW output power, ball lens, pin layout 3	YES	5
ML1217	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, aspherical lens, pin layout 3	YES	5
ML1218	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, flat lens, pin layout 2	YES	5
ML1219	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, flat lens, pin layout 3	YES	5
ML1220	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, aspherical lens, pin layout 3	YES	5
ML1221	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, ball lens, pin layout 3	YES	5
ML1222	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, flat lens, pin layout 3	YES	5
ML1223	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1224	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1225	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1226	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, horizontal flange	YES	5, 6
ML1227	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, horizontal flange	YES	5
ML1228	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, without isolator, no flange	YES	5
ML1229	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, without isolator, no flange	YES	5
ML1230	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1231	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, without isolator, no flange	YES	5, 6
ML1232	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, without isolator, no flange	YES	5
ML1233	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5

Sales part	Description	RoHS compliant	Exemption clause (s)
ML1234	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1235	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1236	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, horizontal flange	YES	5, 6
ML1237	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, horizontal flange	YES	5
ML1238	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/PC connector, pin layout 2, with isolator, no flange	YES	5
ML1239	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, SC/APC connector, pin layout 2, with isolator, no flange	YES	5
ML1240	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/PC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1241	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, FC/APC connector, pin layout 2, with isolator, no flange	YES	5, 6
ML1242	1550 nm FP fiber pigtailed module for analog applications, 3 mW output power, no connector, pin layout 2, with isolator, no flange	YES	5
ML1243	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 2	YES	5
ML1244	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 1	YES	5
ML1245	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 2	YES	5
ML1246	1310 nm DFB TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 1	YES	5
ML1247	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 1	YES	5
ML1248	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, aspherical lens, pin layout 2	YES	5
ML1249	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, ball lens, pin layout 1	YES	5
ML1250	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, ball lens, pin layout 2	YES	5
ML1251	1310 nm FP TO-can for 2.5 Gb/s applications, 7 mW output power, flat lens, pin layout 1	YES	5
ML1252	1430 nm FP TO-can for 1.25 Gb/s applications, 3 mW output power, ball lens, pin layout 1	YES	5



Sales part	Description	RoHS compliant	Exemption clause (s)
ML1253	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, aspherical lens, pin layout 1	YES	5
ML1254	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, aspherical lens, pin layout 2	YES	5
ML1255	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, aspherical lens, pin layout 3	YES	5
ML1256	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, flat lens, pin layout 1	YES	5
ML1257	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, flat lens, pin layout 2	YES	5
ML1258	1490 nm DFB TO-can for 2.5 Gb/s applications, 10 mW output power, flat lens, pin layout 3	YES	5
ML1259	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, aspherical lens, pin layout 1	YES	5
ML1260	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, aspherical lens, pin layout 2	YES	5
ML1261	1490 nm DFB TO-can for 2.5 Gb/s applications, 6 mW output power, flat lens, pin layout 1	YES	5
ML1262	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, aspherical lens, pin layout 1	YES	5
ML1263	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, aspherical lens, pin layout 2	YES	5
ML1264	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, ball lens, pin layout 1	YES	5
ML1265	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, ball lens, pin layout 2	YES	5
ML1266	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, flat lens, pin layout 1	YES	5
ML1267	1550 nm FP TO-can for 2.5 Gb/s applications, 5 mW output power, flat lens, pin layout 2	YES	5
ML1268	1550 nm FP oxide stripe	YES	
ML1269	1550 nm FP diode laser unmounted bar	YES	
ML1273	60W 808nm CW diode laser bar	YES	
ML1274	60W 795nm CW diode laser bar	YES	
ML1275	100W 808nm QCW diode laser bar	YES	
ML1277	40W 808nm CW diode laser bar	YES	
ML1278	40W 795nm CW diode laser bar	YES	
ML1279	50W 808nm CW diode laser bar with narrow Divergence Design (noDD)	YES	

## 5 RoHS COMPLIANCE STATEMENT

I certify to the best of my knowledge, based on available information conducted to me, as follows:

The products listed above, with the listed allowed exceptions, do not contain any homogeneous material that:

- a) contains lead (Pb) in excess of 0.1 weight-% (1000 ppm)
- b) contains mercury (Hg) in excess of 0.1 weight-% (1000 ppm)
- c) contains hexavalent chromium (Cr VI) in excess of 0.1 weight-% (1000 ppm)
- d) contains polybrominated biphenyls (PBB) or polybrominated dimethyl ethers (PBDE) in excess of 0.1 weight-% (1000 ppm)
- e) contains cadmium (Cd) in excess of 0.01 weight-% (100 ppm)

Exceptions:

- 1) Sealing glass in TO-can lens cap or discrete lens contains lead-borate (PbO). As lead in glass of electric components, it is exempted from RoHS requirements (exemption clause 5).
- 2) FC/PC and FC/APC connectors' ring and fixing nut (copper:zinc alloy) contain minor quantities of lead. As the lead content is <4 weight-% it is exempted from RoHS requirements (exemption clause 6).

Signature:



Name (printed):

Pekko Sipilä

Title:

VP New Product Introduction

Date:

2-May-2006

## 6 REFERENCES

Directive 2002/95/ec of the European Parliament and of the Council  
[http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_037/l\\_03720030213en00190023.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00190023.pdf)



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