

ROHS & ELV

RESTRICTION OF HAZARDOUS SUBSTANCES & END OF LIFE-VEHICLE:

The European Union (EU) is introducing new legislation that will affect the electronics industry. The coming RoHS directive (Restriction of Hazardous Substances) will ban six materials from use. By 1st January 2006, Member States of the European Union shall ensure that new electrical and electronic equipment's put on the market do not contain lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr⁺⁶), polybrominated biphenyls (PBBs), and/or polybrominated diphenyl ethers (PBDEs).

RoHS/ELV COMPLIANT CHIP RESISTORS PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|----------------|--------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| Chip Resistors | RC | O O | | O | O | O | O | O |
| | YC/TC | O O | | O | O | O | O | O |
| | RT/RJ | O O | | O | O | O | O | O |
| | RL | O O | | O | O | O | O | O |
| | AR | O O | | O | O | O | O | O |
| | TR | O O | | O | O | O | O | O |
| | SR | O O | | O | O | O | O | O |
| | PF/PH | O O | | O | O | O | O | O |
| | RV | O O | | O | O | O | O | O |
| | PR | O O | | O | O | O | O | O |
| | RE | O O | | O | O | O | O | O |
| | AF | O O | | O | O | O | O | O |
| | PT | O O | | O | O | O | O | O |
| | ATV | O O | | O | O | O | O | O |

ROHS & ELV

RoHS/ELV COMPLIANT MLCC PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|---------------|--------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| MLCC | CC | O | O | O | O | O | O | O |
| | CH | O | O | O | O | O | O | O |
| | CM | O | O | O | O | O | O | O |
| | CL | O | O | O | O | O | O | O |
| | SC | O | O | O | O | O | O | O |
| | CX | O | O | O | O | O | O | O |
| | CA | O | O | O | O | O | O | O |

RoHS/ELV COMPLIANT MLV PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|---------------|--------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| MLV | VR | O | O | O | O | O | O | O |

RoHS/ELV COMPLIANT HF PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|---------------|-------------------------------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| HF product | Metal antenna | O | O | O | O | O | O | O |
| | Chip/Patch/ Active antenna | O | O | O | O | O | O | O |
| | RF components | O | O | O | O | O | O | O |

ROHS & ELV

RoHS/ELV COMPLIANT LEADED RESISTOR PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|---------------|-----------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| Leaded R | MFR | O | O | O | O | O | O | O |
| | MFP | O | O | O | O | O | O | O |
| | MHP | O | O | O | O | O | O | O |
| | MF0 | O | O | O | O | O | O | O |
| | FMF | O | O | O | O | O | O | O |
| | FM0 | O | O | O | O | O | O | O |
| | FMP | O | O | O | O | O | O | O |
| | RSF | O | O | O | O | O | O | O |
| | LIR | O | O | O | O | O | O | O |
| | FRM | O | O | O | O | O | O | O |
| | MMF | O | O | O | O | O | O | O |
| | MMP | O | O | O | O | O | O | O |
| | CFR | O | O | O | O | O | O | O |
| | CF0 | O | O | O | O | O | O | O |
| | FCR | O | O | O | O | O | O | O |
| | FC0 | O | O | O | O | O | O | O |
| | NCR | O | O | O | O | O | O | O |
| | MCF | O | O | O | O | O | O | O |
| | MCP | O | O | O | O | O | O | O |
| | HHV | O | O | O | O | O | O | O |
| | APR | O | O | O | O | O | O | O |
| | HTR / HTM | O | O | O | O | O | O | O |
| | CFN | O | O | O | O | O | O | O |
| | MFN | O | O | O | O | O | O | O |
| | ZOR | O | O | O | O | O | O | O |
| | JPW | O | O | O | O | | O | |

ROHS & ELV

| Product Group | Series | Six Hazardous Substances | | | | | | Others (Chlorine or Bromine) |
|---------------|-----------|--------------------------|--------------|--------------|---|---------------------------------|--|---------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | |
| Leaded R | KNP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NKN | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | FKN | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | PNP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SQP / NSP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SQM / NSM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SQZ / NSZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | PSP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | PSM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | FTR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SLR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | AHA / AHP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ROHS & ELV

YAGEO RoHS/ELV COMPLIANT ELECTROLYTIC CAPACITORS PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|------------------------|--------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| E-Cap Miniature | SS | O | O | O | O | O | O | O |
| | S5 | O | O | O | O | O | O | O |
| | SK | O | O | O | O | O | O | O |
| | SEK | O | O | O | O | O | O | O |
| | SH | O | O | O | O | O | O | O |
| | SG | O | O | O | O | O | O | O |
| | SP | O | O | O | O | O | O | O |
| | SB | O | O | O | O | O | O | O |
| | SR | O | O | O | O | O | O | O |
| | SN | O | O | O | O | O | O | O |
| | SC | O | O | O | O | O | O | O |
| | SJ | O | O | O | O | O | O | O |
| | SQ | O | O | O | O | O | O | O |
| | SY | O | O | O | O | O | O | O |
| | SZ | O | O | O | O | O | O | O |
| | ST | O | O | O | O | O | O | O |
| | SU | O | O | O | O | O | O | O |
| | SW | O | O | O | O | O | O | O |
| SL | O | O | O | O | O | O | O | |
| SD | O | O | O | O | O | O | O | |
| E-Cap Large Can | LH | O | O | O | O | O | O | O |
| | LG | O | O | O | O | O | O | O |
| | LV | O | O | O | O | O | O | O |
| | LC | O | O | O | O | O | O | O |

ROHS & ELV

| Product Group | Series | Six Hazardous Substances | | | | | | Others (Chlorine or Bromine) |
|------------------------|--------|--------------------------|--------------|--------------|---|---------------------------------|--|---------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | |
| E-Cap Surface Mount | CA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CB | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CD | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CX | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E-Cap Polymer | CG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | CP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E-Cap Screw Type | NP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SL-N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SSL-N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | STD-N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| XL-N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

ROHS & ELV

RoHS/ELV COMPLIANT INDUCTOR PRODUCT LIST

O: RoHS/ELV Compliant; X: Non RoHS/ELV Compliant

| Product Group | Series | Six Hazardous Substances | | | | | | Others |
|---------------|------------|--------------------------|--------------|--------------|---|---------------------------------|--|-------------------------------|
| | | lead (Pb) | mercury (Hg) | cadmium (Cd) | hexavalent chromium (Cr ⁺⁶) | polybrominated biphenyls (PBBs) | polybrominated diphenyl ethers (PBDEs) | Halogen (Chlorine or Bromine) |
| Inductor | CL-N | O | O | O | O | O | O | O |
| | NL-N | O | O | O | O | O | O | O |
| | NLC - N | | | | | | | O |
| | LCN - N | | | | | | | O |
| | PB/SB/NB-N | O | O | O | O | O | O | O |
| | RC-N | O | O | O | O | O | O | O |
| | SCD-N | O | O | O | O | O | O | O |
| | SDS-N | O | O | O | O | O | O | O |
| | SL-N | O | O | O | O | O | O | O |
| | SSL-N | O | O | O | O | O | O | O |
| | STD-N | O | O | O | O | O | O | O |
| | XL-N | O | O | O | O | O | O | O |