

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

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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

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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	

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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	○	○	○	○	○	○	○
	NKN	○	○	○	○	○	○	○
	FKN	○	○	○	○	○	○	○
	PNP	○	○	○	○	○	○	○
	SQP / NSP	○	○	○	○	○	○	○
	SQM / NSM	○	○	○	○	○	○	○
	SQZ / NSZ	○	○	○	○	○	○	○
	PSP	○	○	○	○	○	○	○
	PSM	○	○	○	○	○	○	○
	FTR	○	○	○	○	○	○	○
	SLR	○	○	○	○	○	○	○
	AHA / AHP	○	○	○	○	○	○	○

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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	○	○	○	○	○	○	○
	CB	○	○	○	○	○	○	○
	CE	○	○	○	○	○	○	○
	CZ	○	○	○	○	○	○	○
	CD	○	○	○	○	○	○	○
	CX	○	○	○	○	○	○	○
	CH	○	○	○	○	○	○	○
E-Cap Polymer	CG	○	○	○	○	○	○	○
	CP	○	○	○	○	○	○	○
E-Cap Screw Type	NP	○	○	○	○	○	○	○
	NM	○	○	○	○	○	○	○
	NF	○	○	○	○	○	○	○
	NH	○	○	○	○	○	○	○
	NG	○	○	○	○	○	○	○
	SL-N	○	○	○	○	○	○	○
	SSL-N	○	○	○	○	○	○	○
	STD-N	○	○	○	○	○	○	○
XL-N	○	○	○	○	○	○	○	

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