RoHS 2011/65/EU (as amended by 2015/863/EU)
Syfer Branded Product Range Status

Note: Parts with customisation suffix codes applied (2 or 3 digit codes added to the end of the standard part number) may have a different RoHS status to the basic part number. Always check the status of customised parts with the factory.

Surface Mount Capacitor Status

1210	Y	100	0103	J	X	T	□□□
Chip Size	**Termination**	**Voltage d.c. (unless stated)**	**Capacitance in Pico farads (pF)**	**Capacitance Tolerance**	**Dielectric**	**Packaging**	**Suffix Code**
0603 **0505** **0805** **1111** **1206** **1210** **1808** **1812** **1825** **2220** **2225** **3640** **4040** **5550** **8060**	**Y** = FlexiCap™ termination base with nickel barrier (100% matte tin plating). RoHS compliant. **H** = FlexiCap™ termination base with nickel barrier (tin/lead plating with min. 10% lead). Not RoHS compliant. **F** = Silver Palladium. RoHS compliant **J** = nickel barrier (100% matte tin plating). RoHS compliant **A** = nickel barrier (tin/lead plating with min. 10% lead). Not RoHS compliant **2** = non-magnetic (100% matt tin plating) RoHS compliant. **3** = FlexiCap™ base with non-magnetic (100% matt tin plating) RoHS compliant. **4** = non-magnetic (Tin/Lead Plating) Not RoHS compliant **5** = FlexiCap™ base with non-magnetic (Tin/Lead Plating) Not RoHS compliant.	**010** = 10V **016** = 16V **025** = 25V **050** = 50V **063** = 63V **100** = 100V **200** = 200V **250** = 250V **500** = 500V **630** = 630V **1K0** = 1kV **1K2** =1.2kV **1K5** =1.5kV **2K0** = 2kV **2K5** =2.5kV **3K0** =3kV **4K0** =4kV **5K0** =5kV **6K0** =6kV **8K0** =8kV **10K** =10kV **12K** =12Kv **A15 =** 115Vac 400Hz **A25** =250Vac 50/60Hz	<1.0pF Insert a P for the decimal point as the first character. e.g., **P300** = 0.3pF Values in 0.1pF steps ≥1.0pF & <10pF Insert a P for the decimal point as the second character. e.g., **8P20** = 8.2pF Values are E24 series ≥10pF First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is the number of zeros following. e.g., **0101** = 100 pF Values are E12 series	**<4.7pF** **H**: ± 0.05pF **B**: ± 0.10pF **C**: ± 0.25pF **D**: ± 0.5pF **<10pF** **B**: ± 0.10pF **C**: ± 0.25pF **D**: ± 0.5pF **F**: ± 1.0pF **≥10pF** **F**: ± 1% **G**: ± 2% **J**: ± 5% **K**: ± 10% **M**: ± 20%	**A** = C0G/NP0 AEC-Q200 **B** = 2X1/BX **C** = C0G/NP0 **D** = X7R (2R1) with IECQ-CECC **E** = X7R AEC-Q200 **F** = C0G/NP0 with IECQ-CECC **G** = C0G/NP0 **J** = X7R **K** = C0G/NP0 AEC-Q200 **N** = X8R **P** = X5R **Q** = High Q **R** = 2C1/BZ **S** = X7R AEC-Q200 **T** = X8R AEC-Q200 **U** = Ultra Low ESR **X** = X7R	**T** = 178mm (7") reel **R** = 330mm (13") reel **B** = Bulk pack – tubs or trays	Used for specific customer requirements

- <250Vdc or <125Vac. Dielectric ceramic must be Lead free to be RoHS 2011/65/EU compliant.
- ≥250Vdc or ≥125Vac. Dielectric ceramic does not need to be Lead free to be RoHS 2011/65/EU compliant (exemption 7(c)-II).

Case Size	Termination Type(1)	Dielectric(2)	2011/65/EU Compliant?	RoHS Exemption?	Comments
All	Y, J, F, 2 & 3	A, C, F, H, Q, & U	Yes	No	All parts with dielectrics listed in (2) and termination type listed in (1) have been supplied 2011/65/EU compliant from 1st October 2012
All	Y, J, F, 2 & 3	D, E, G, J, K, P, S, & X	Yes	No	All parts with dielectrics listed in (2) and termination type listed in (1) have been supplied 2011/65/EU compliant from 1st July 2012
All	J, F	B, R	Yes	No	All parts with dielectrics listed in (2) and termination type listed in (1) have been supplied 2011/65/EU compliant from 1st July 2012
All	Y	B, R	Refer to factory	Refer to factory	Refer to MLCC catalogue or factory for confirmation of RoHS status on an individual part number basis
All	J, Y	N & T	Yes	No	X8R dielectric material was changed to lead free RoHS compliant from 1st February 2017
All	H, A, 4 & 5	Any dielectric	NO	Not Applicable	Terminations contain Lead (Pb) and there is no change to RoHS status. Parts are not RoHS compliant

Table 1: Surface Mount Capacitor RoHS Status

Exemptions that may apply to Table 1:

- 7(c)-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezoelectronic devices, or in a glass or ceramic matrix compound
- 7(c)-II Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher

Radial Leaded Capacitor Status

8111M	100	0102	J	C	□□□	□□□
Chip Size	**Voltage d.c. (unless stated)**	**Capacitance in Pico farads (pF)**	**Capacitance Tolerance**	**Dielectric**	**Suffix Code**	**Suffix Code**
8111M **8111N** **8121M** **8121N** **8121T** **8131M** **8131T** **8141M** **8151M** **8161M** **8165M** **8171M**	**010** = 10V **016** = 16V **025** = 25V **050** = 50V **063** = 63V **100** = 100V **200** = 200V **250** = 250V **500** = 500V **630** = 630V **1K0** = 1kV **1K2** =1.2kV **1K5** =1.5kV **2K0** = 2kV **2K5** =2.5kV **3K0** =3kV **4K0** =4kV **5K0** =5kV **6K0** =6kV **8K0** =8kV **10K** =10kV **12K** =12Kv **A15 =** 115Vac 400Hz **A25** =250Vac 50/60Hz	<10pF Insert a P for the decimal point as the second character. e.g., **8P20** = 8.2pF ≥10pF First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is the number of zeros following. e.g., **0101** = 100 pF	**<10pF** **D**: ± 0.5pF **F**: ± 1.0pF **≥10pF** **F**: ± 1% **G**: ± 2% **J**: ± 5% **K**: ± 10% **M**: ± 20% **≥27pF** **G**: ± 2% (C0G/NP0 only)	**C** = C0G/NP0 (1B/CG; CG/BP) **X** = X7R (2R1) To special order **R** = 2C1/BZ **B** = 2X1/BX	Used for specific customer requirements	**C42** denotes RoHS compliant **A31** or **A97** denote non-RoHS tin/lead wires. Suffix A97 for 8111 to 8141 Suffix A31 for 8151 to 8171

Case Size	Dielectric	Suffix Code	2011/65/EU Compliant?	RoHS Exemption?	Comments
All	Refer to surface mount dielectric codes	C42	Yes*	Refer to surface mount dielectric codes	All radial parts with C42 suffix code are RoHS 2011/65/EU compliant from 1st Nov 2012 * Note: X8R <250Vdc is not RoHS compliant
All	All	Parts with no C42 suffix such as A31 or A97	No	Not Applicable	No change to RoHS status. Parts with no C42 suffix code are not RoHS compliant

Table 2: Radial Capacitor RoHS Status

Filter Component RoHS 2011/65/EU Status

If part number has a suffix code, then refer to factory.

Filter Series	2011/65/EU Compliant?	RoHS Exemption?	Comments
E01, E03, E07, SBSPP	Yes	No	Refer to Table 1 for compliance dates
SBSM & SBSG	Yes	≥250Vdc 7(c)-II	Parts <250Vdc do not contain Lead. Parts ≥250Vdc may contain Lead in the dielectric
SFS* Solder-in Panel Mount	<250Vdc: * ≥250Vdc: Yes	≥250Vdc 6(b), 7(a), 7(c)-II and 24	*<250Vdc refer to factory
SF** Bolt-in Panel Mount	<250Vdc: * ≥250Vdc: Yes	≥250Vdc 6(b), 7(c)-II and 24	*<250Vdc refer to factory
SLO & SLS Hermetic Panel Mounts	No	Not Applicable	Not RoHS compliant
SL** Metallised Film Panel Mount	Yes	No	Compliance status not changed

Table 3: Filter RoHS Status

Exemptions that may apply to Table 3 :

6(b) Lead as an alloying element in aluminium containing up to 0.4 % lead by weight

7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by Weight or more lead)

7(c)-II Lead in dielectric ceramic in capacitors for a rated voltage of 125 Vac or 250 Vdc or higher

24 Lead in solders for the soldering to machined through-hole discoidal and planar array ceramic multilayer capacitors