Metal Oxide Varistors (MOV) Data Sheet

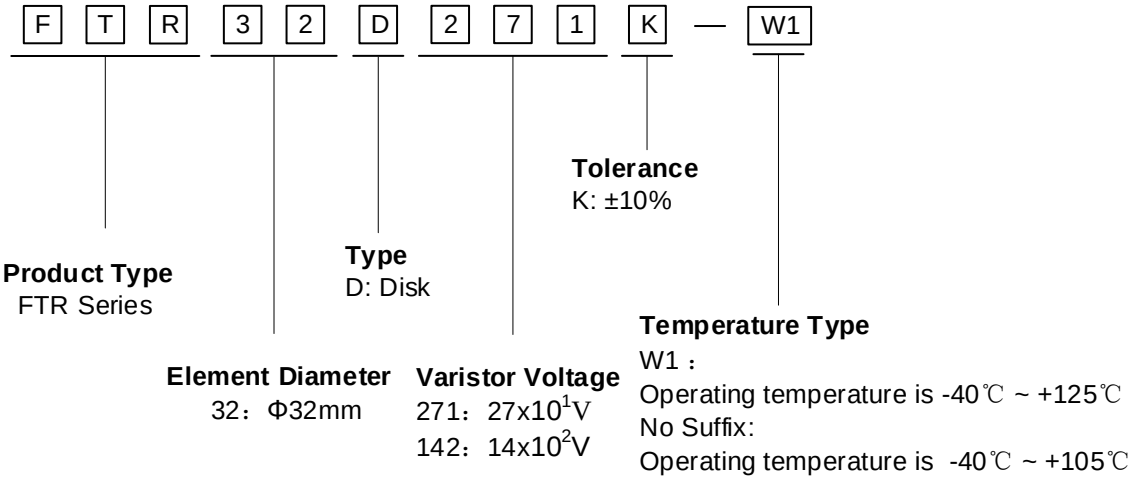
Features

- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature：-40℃ ~ +105℃&-40℃ ~ +125℃
- Storage Temperature：-40℃ ~ +125℃
- Agency recognition: UL 1449 4th /cUL/CQC

Applications

- Power supply, Telecommunication, Smart meter, or PLC protection
- Surge protection in consumer electronics
- Surge protection in industrial electronics
- Surge protection in electronic home appliances, gas and petroleum appliances
- Relay and electromagnetic valve surge absorption

Part Number Code

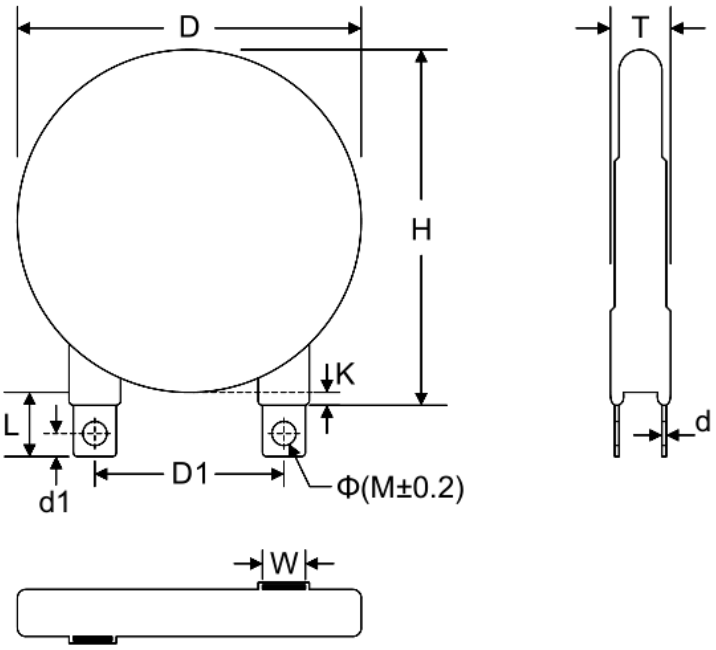


Electrical Characteristics

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge current	Maximum Energy (10/1000μs)	Dimension Tmax
Standard	V_{AC}(V)	V_{DC}(V)	V_{1mA}(V)	I_P(A)	V_C(V)	(A)	(J)	(mm)
FTR32D181K	115	150	180(162~198)	200	300	25000	240	6.1
FTR32D201K	130	170	200(180~220)	200	340	25000	250	6.2
FTR32D221K	140	180	220(198~242)	200	360	25000	270	6.3
FTR32D241K	150	200	240(216~264)	200	395	25000	290	6.4
FTR32D271K	175	225	270(243~297)	200	455	25000	300	6.6
FTR32D301K	190	250	300(270~330)	200	500	25000	330	6.8
FTR32D331K	210	275	330(297~363)	200	550	25000	360	6.9
FTR32D361K	230	300	360(324~396)	200	595	25000	380	7.1
FTR32D391K	250	320	390(351~429)	200	650	25000	400	7.3
FTR32D431K	275	350	430(387~473)	200	710	25000	430	7.5
FTR32D471K	300	385	470(423~517)	200	775	25000	460	7.8
FTR32D511K	320	415	510(459~561)	200	845	25000	510	8.0
FTR32D561K	350	460	560(504~616)	200	925	25000	540	8.5
FTR32D621K	385	505	620(558~682)	200	1025	25000	570	8.7
FTR32D681K	420	560	680(612~718)	200	1120	25000	600	9.0
FTR32D751K	460	615	750(675~825)	200	1240	25000	620	9.4
FTR32D781K	485	640	780(702~858)	200	1290	25000	660	9.6
FTR32D821K	510	670	820(738~902)	200	1355	25000	700	9.8
FTR32D911K	550	745	910(819~1001)	200	1500	25000	750	10.4
FTR32D102K	625	825	1000(900~1100)	200	1650	25000	810	11.2
FTR32D112K	680	895	1100(990~1210)	200	1815	25000	910	11.8
FTR32D122K	750	990	1200(1080~1320)	200	1980	25000	960	12.3
FTR32D142K	880	1140	1400(1260~1540)	200	2310	25000	1020	13.3
FTR32D162K	1000	1280	1600(1440~1760)	200	2640	25000	1080	14.3

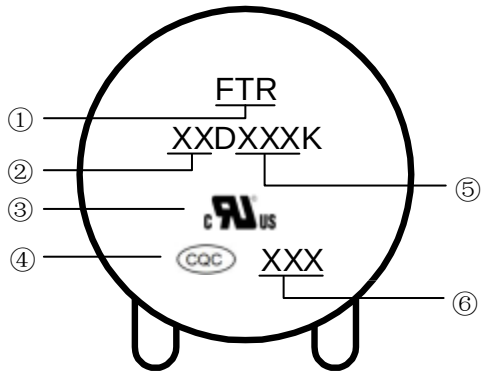
Notes: 1. Leakage Current (@83% of V1mA)： IR≤25μ A (181K~162K)

Dimensions



Symbol	H (max.)	D （max.）	D1 （±1）	L (min.)	K （max.）	W (±0.5)	d (±0.25)	d1 (±0.25)	ΦM (±0.2)	Tmax
Dimension (mm)	40	36	25.4	14.5	3.2	7	0.5	3.7	3.2	Please refer to the Electrical Characteristics Table

Marking Code



① QG Logo

② Disk Size

③ UL Accreditation Logo

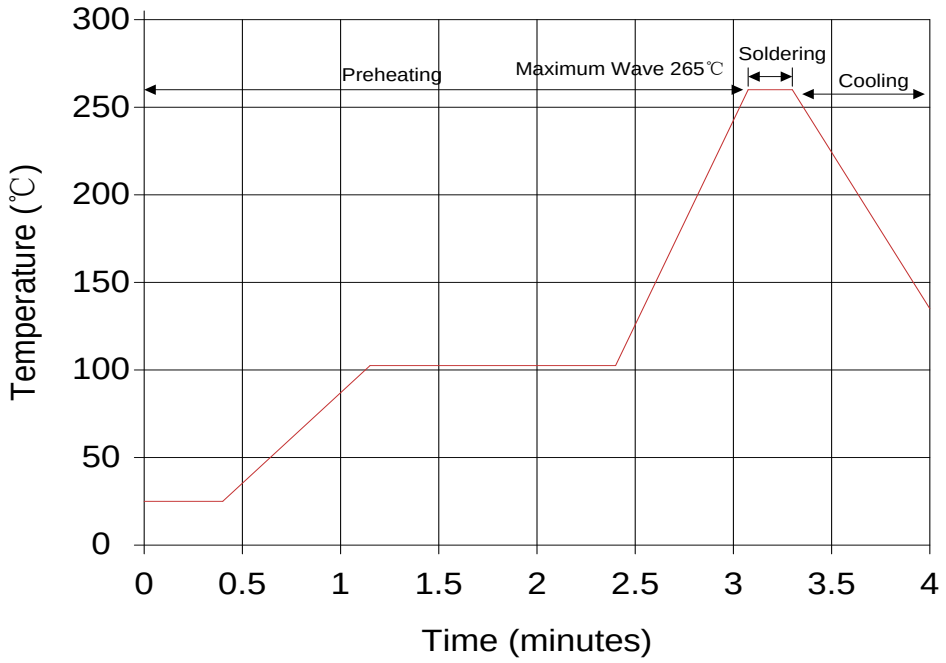
④ CQC Accreditation Logo

⑤ Varistor Voltage

⑥ Date Code

Soldering Recommendation

Wave Lead Free Soldering Recommendation



Item	Conditions
Peak Temperature	265℃
Dipping Time	10 seconds(max.)
Soldering	1 time

Recommendation Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360℃(max.)
Soldering Time	3 seconds(max.)
Distance from Varistor	2mm (min.)

Quantity

Packaging Dimensions (Unit: mm)	Quantity
bulk 	60pcs/bag （181K~511K）
	32pcs/bag (561K~162K)