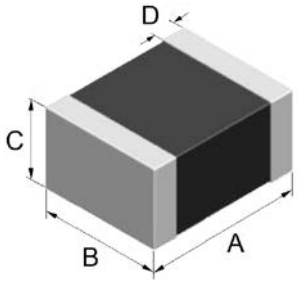
SMD Transient Voltage Suppressors TVSM1210SSPF-Series

1. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)
1210	3.20±0.20	2.50±0.20	1.50 max.	0.50±0.20

2. Part Numbering

TVSM	1210	SSP	F	680	-	251	A	□
A	B	C	D	E		F	G	H

A: Series	Multilayer Varistor
B: Dimension	
C: Category Code	Standard Surge Protection with PoE
D: Product Grade	General Grade
E: Voltage Code	680=Breakdown Voltage 68V
F: Characteristic Code	251= Peak Current 250A
G: Characteristic Unit Code	A＝Amp
H: Type Code	

3. Technology Data

TAI-TECH Part Number	Maximum allowable continuous AC voltage @ 50-60Hz (V)	Maximum allowable continuous DC voltage (V)	Varistor breakdown voltage (V)	Maximum allowable clamping voltage (V)	Maximum peak current (A)
TVSM1210SSPF680-251A	40	56	68(61.2~74.8)	110	250

Notes :

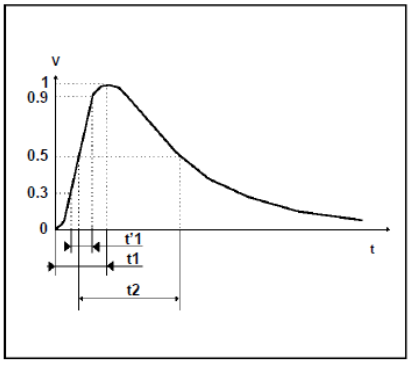
1. The varistor breakdown voltage was measured at 1mA.
2. The clamping voltage was measured at 8/20μs standard current, 1210(2.5A)
3. The peak current was tested at 8/20μs waveform.

3-1. Reference Data			
ITEM	Symbol	Unit	Value
Maximum energy absorption	E	J	2.3
Typical capacitance value measured at 1KHz	C	pF	300
Response time	Trise	ns	< 1
Leakage current at Vv x 80% (at initial state)	I_{VV}	μA	< 50
Leakage current at Vv x 80% (after surge test)	I_{VVA}	μA	< 200
Operation ambient temperature	T_{OPT}	℃	-50~+85
Storage temperature range	T_{STG}	℃	-50~+125
3-2. Other Data			
Body			ZnO
End termination			Ag/Ni/Sn
Packaging			Reel
Complies with standard			IEC61000-4-5
Complies with RoHs standard			Yes
Lead content			< 1000 ppm
Marking			None

Notes :

1. The capacitance and energy values only for customer reference, it's not formal specification.

4. Surge Wave Form



IEC61000-4-5 Standards

SEVERITY LEVEL	t1 (=1.67t'1)	t2
1	8μS	20μS
2	10μS	1000μS

8/20μs waveform current