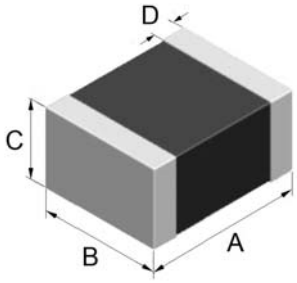
SMD Transient Voltage Suppressors TVSM1210SSXO-Series

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	SSX	O	470	-	401	A	□
A	B	C	D	E		F	G	H

A: Series	Multilayer Varistor
B: Dimension	
C: Category Code	Standard Surge Protection
D: Product Grade	O =Industrial Grade
E: Voltage Code	470=Breakdown Voltage 47V
F: Characteristic Code	401= Peak Current 400A
G: Characteristic Unit Code	A＝Amp
H: Inner 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)
TVSM1210SSXO470-401A	30	38	47(42.3~51.7)	77	400

Notes :

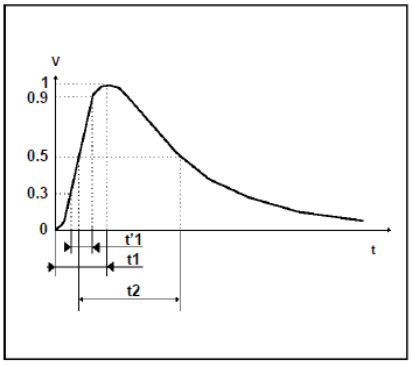
1. The varistor breakdown voltage was measured at 1mA.
2. The clamping voltage was measured at 8/20μs standard current, 1210(2.5A)
3. The peak current was tested at 8/20μs waveform.

3-1. Reference Data			
ITEM	Symbol	Unit	Value
Maximum energy absorption	E	J	2.0
Typical capacitance value measured at 1KHz	C	pF	530
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