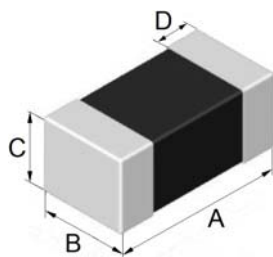


SMD Transient Voltage Suppressors

TVSM0603SSXF-Series

1. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)
0603	1.60±0.15	0.80±0.10	0.90 max.	0.30±0.10

2. Part Numbering

TVSM 0603 SSX F 150 - 300 A □
 A B C D E F G H

A: Series	Multilayer Varistor
B: Dimension	
C: Category Code	Standard Surge Protection
D: Product Grade	General Grade
E: Voltage Code	150=Breakdown Voltage 15V
F: Characteristic Code	300= Peak Current 30A
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)
TVSM0603SSXF150-300A	4	5.5	15(8~18)	24	30
TVSM0603SSXF240-300A	14	18	24(21.6~26.4)	39	30

Notes :

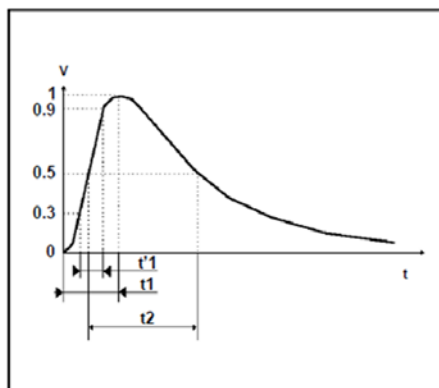
1. The varistor breakdown voltage was measured at 1mA.
2. The clamping voltage was measured at 8/20μs standard current.
3. The peak current was tested at 8/20μs waveform.

3-1. Reference Data			
ITEM	Symbol	Unit	Value
Maximum energy absorption	E	J	0.1
Typical capacitance value measured at 1KHz	C	pF	TVSM0603SSXF150-300A : 170 TVSM0603SSXF240-300A : 160
Response time	Trise	ns	< 1
Non-linear coefficient	α	μA	> 15 @TVSM0603SSXF150-300A
Leakage current at Vv x 80% (at initial state)	I _{VV}	μA	< 50
Leakage current at Vv x 80% (after surge or ESD test)	I _{VVA}	μA	< 200 @TVSM0603SSXF150-300A
Leakage current at Vv x 80% (after surge test)	I _{VVA}	μA	< 200 @TVSM0603SSXF240-300A
Operation ambient temperature	T _{OPT}	°C	-50~+125
Storage temperature range	T _{STG}	°C	-50~+150
Maximum ESD protection	IEC61000-4-2		Level 4 @TVSM0603SSXF150-300A
3-2. Other Data			
Body	ZnO		
End termination	Ag/Ni/Sn		
Packaging	Reel		
Complies with standard	IEC61000-4-2 @TVSM0603SSXF150-300A 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.

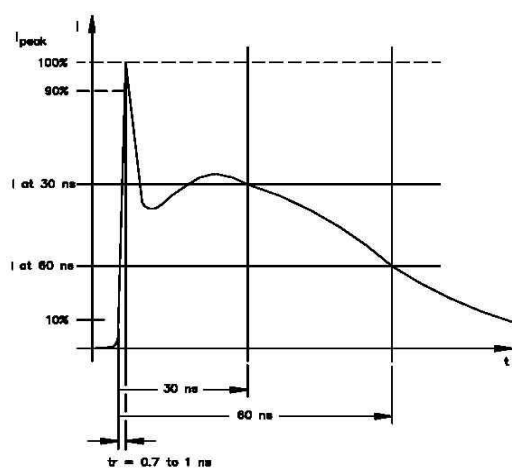
4. Surge and ESD Wave Form



IEC61000-4-5 Standards

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

8/20μs waveform current



IEC61000-4-2 Standards

SEVERITY LEVEL	AIR DISCHARGE	DIRECT DISCHARGE
1	2 KV	2 KV
2	4 KV	4 KV
3	8 KV	6 KV
4	15 KV	8 KV

ESD current pulse waveform