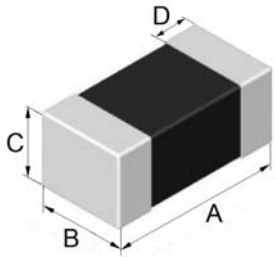
SMD Transient Voltage Suppressors TVSM0402EHSF-Series

1. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)
0402	1.00±0.10	0.50±0.10	0.60 max.	0.25±0.10

2. Part Numbering

TVSM 0402 EHS F 240 - 0R2 P □

A B C D E F G H

A: Series	Multilayer Varistor
B: Dimension	
C: Category Code	High Performance Hi speed Signal ESD Protection
D: Product Grade	General Grade
E: Voltage Code	240=Working Voltage 24V
F: Characteristic Code	0R2=Capacitance 0.2pF
G: Characteristic Unit Code	P＝pF
H: Inner Code	

3. Specification

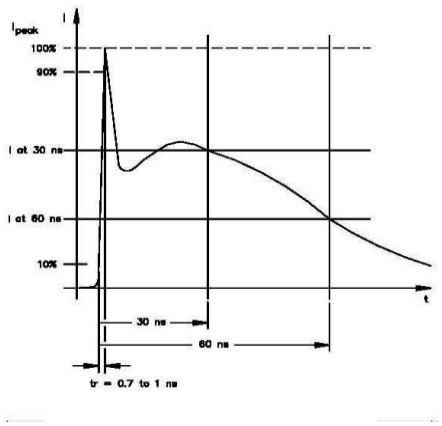
TAI-TECH Part Number	Working Voltage V_{DC} (V) max.	Typical ESD Trigger Voltage (V) typ.	Typical ESD Clamping Voltage @ 30ns (V) typ.	Leakage Current (at Initial State) (μA)	Leakage Current (after ESD Test) (μA)	Cap. Value @ 1MHz (pF)
TVSM0402EHSF240-0R2P	24	300	30	< 0.05	< 10	0.20pF (max. 0.30pF)

Notes :

1. The clamping voltage was measured by IEC61000-4-2 level 4, direct discharge 8KV.
2. The leakage current was measured at V_{DC}.

3-1. Reference Data			
ITEM	Symbol	Unit	Value
Response time	Trise	ns	< 0.5
Operation ambient temperature	T_{OPT}	℃	-50~+125
Storage temperature	T_{STG}	℃	-50~+150
Withstanding ESD capability	IEC61000-4-2		Level 4
3-2. Other Data			
Body			Nano special ceramic
End termination			Ag/Ni/Sn
Packaging			Reel
Complies with standard			IEC61000-4-2
Complies with RoHs standard			Yes
Lead content			< 1000 ppm
Marking			None

4. ESD Wave Form



IEC61000-4-2 Standards

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

IEC61000-4-2 compliant ESD current pulse waveform