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ESD3V3D7 Thru ESD12VD7

3.3V~12Volts ESD Protection Devices

Features

- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- For space saving application
- Fast response ,response time less than 1ns.

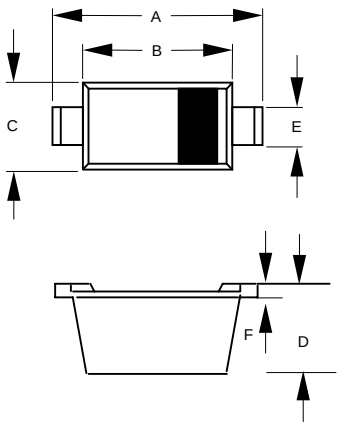
  Epoxy meets UL 94 V-0 flammability rating
  Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant /Halogen-Free Version available("P" Suffix designates RoHS Compliant. HF suffix designates Halogen-Free.See ordering information)

Maximum Ratings

- Operating Junction &StorageTemperature: -55°C to +150°C
- Maximum Thermal Resistance: 833°C/W Junction To Ambient

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±30 ±30	KV
ESD Voltage per human body mode per machine mode		16 400	KV V
Power Dissipation	Pd	150	mw

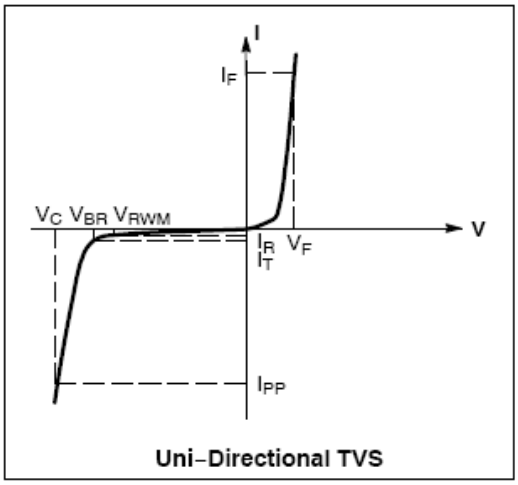
SOD723



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.051	.059	1.30	1.50	
B	.035	.043	0.90	1.10	
C	.022	.026	0.55	0.65	
D	.021	.026	0.525	0.65	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F
P_{pk}	Peak Power Dissipation
C	Max. Capacitance @V_R=0 and f =1MHz



ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted, V_F = 0.9 V Max. @ I_F = 10mA for all types)

Device	Device Marking	V_{RWM} (V)	I_R (μ A) @ V_{RWM}	V_{BR} (V) @ I_T(Note 2)	I_T	I_{PP}(A) +	V_C (V) @Max I_{PP}+	P_{pk} + (W)	C (pF)
		Max	Max	Min	mA	Max	Max	Max	Typ
ESD3V3D7	E0	3.3	2.5	5.0	1.0	10.4	11.9	113	80
ESD5V0D7	E2	5.0	1.0	6.2	1.0	8.8	13.3	117	65
ESD12VD7	E3	12	1.0	13.5	1.0	5.4	23.7	128	30

+Surge current waveform per Figure 1.

2. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

TYPICAL CHARACTERISTICS

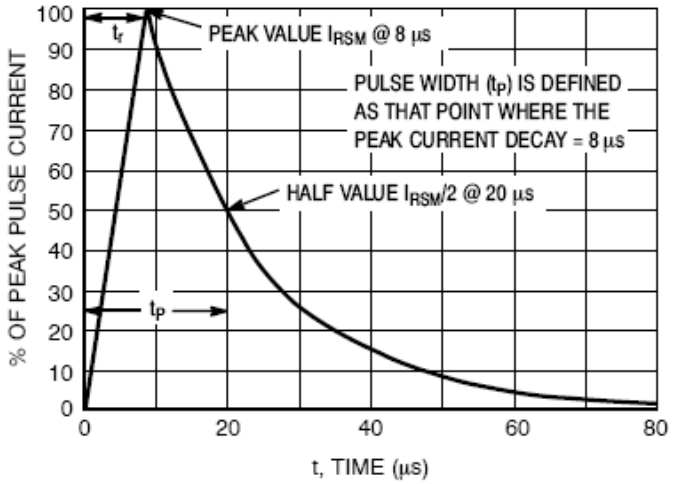


Figure 1. 8 x 20 μs Pulse Waveform

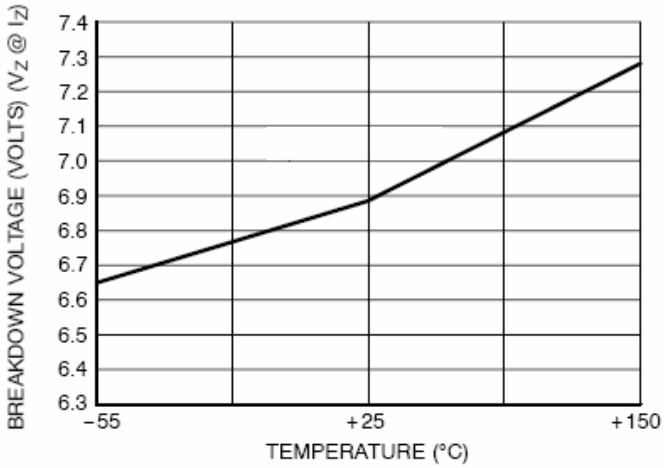


Figure 2. Typical Breakdown Voltage versus Temperature

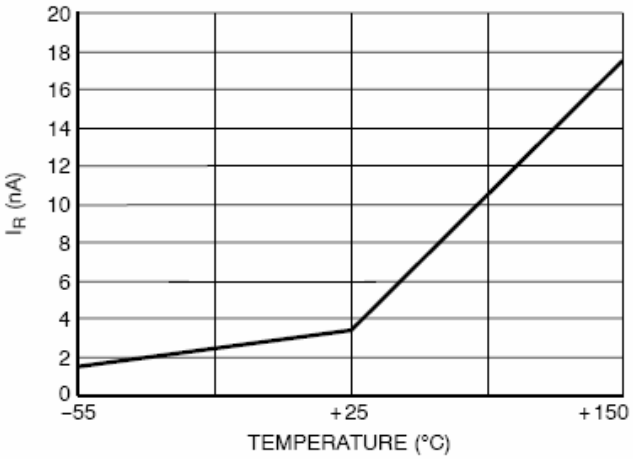


Figure 3. Typical Leakage Current versus Temperature