

Features

- High Power Rating
- Low Capacitance
- Low Leakage
- Low Clamping Voltage
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

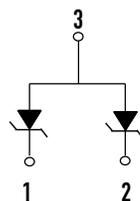
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDSL5V0T2	5M

IEC61000-4-2(ESD)	Air Contact	±20KV ±15KV
Peak Pulse Current(8/20µs)	I _{PP}	5A
Peak Pulse Power (8/20us)	P _{PK}	100W

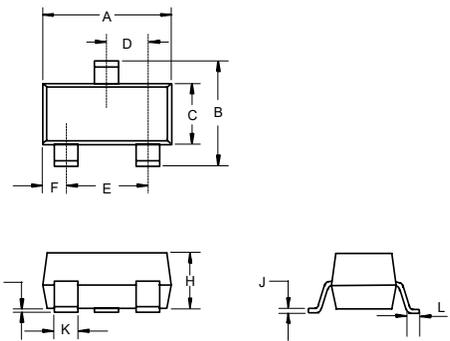
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



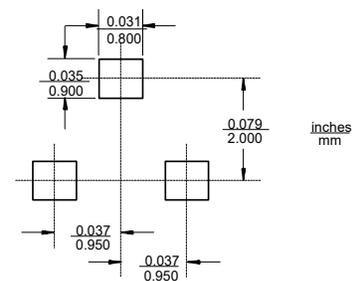
ESD Protection Device

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}	Pin 1 or Pin 2 to Pin 3 and Between Pin 1 and Pin 2			5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, Pin 1 or Pin 2 to Pin 3 and Between Pin 1 and Pin 2	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$, Pin 1 or Pin 2 to Pin 3 and Between Pin 1 and Pin 2			0.5	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$, Pin 1 or Pin 2 to Pin 3		10	15	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}$, $t_p = 8/20\mu\text{s}$, Pin 1 or Pin 2 to Pin 3		15	20	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, Between Pin 1 and Pin 2		0.3	0.4	pF
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, Pin 1 or Pin 2 to Pin 3			0.8	pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

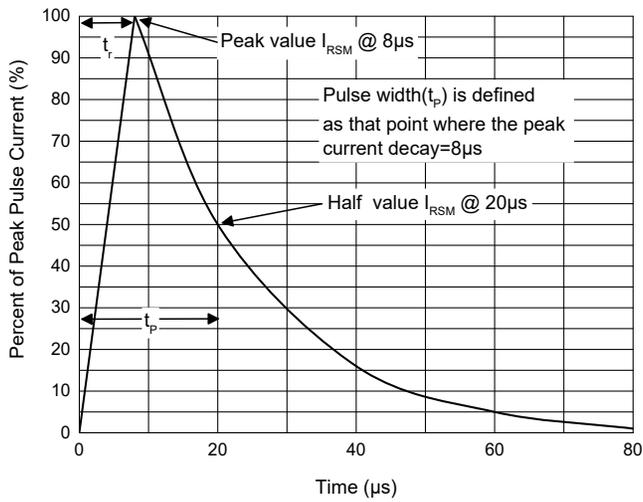


Fig. 3 - Pulse Derating Curve

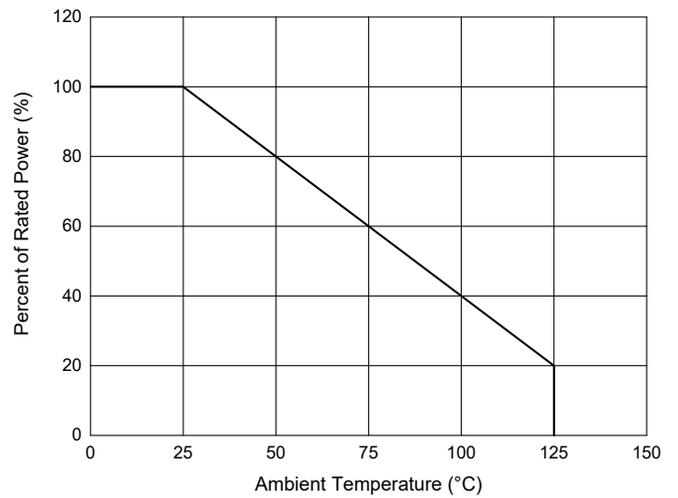


Fig. 3 - Capacitance Characteristics

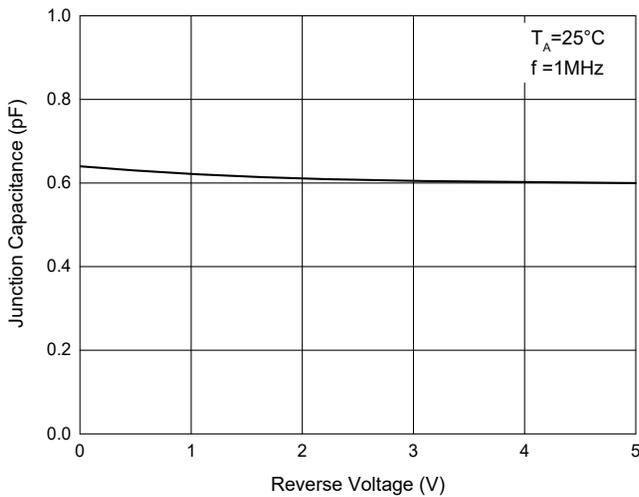
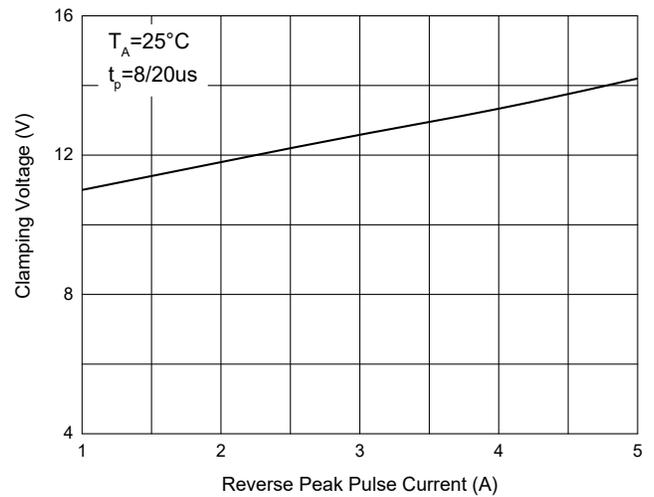


Fig. 4 - Clamping Voltage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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