

Features

- For Sensitive ESD Protection
- Excellent Clamping Capability
- Low Leakage
- Fast Response, Response Time Less than 1ns
- 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
- Maximum Thermal Resistance: 833°C/W Junction to Ambient

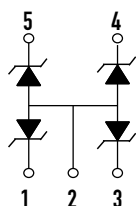
MCC Part Number	Device Marking
ESD5V0J4	12

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
JESD22-A114-B(ESD)	Human Body Machine	16KV 0.4KV
Peak Pulse Power (8/20us)	P _{PK}	200W
Power Dissipation ⁽²⁾	P _D	150mW

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

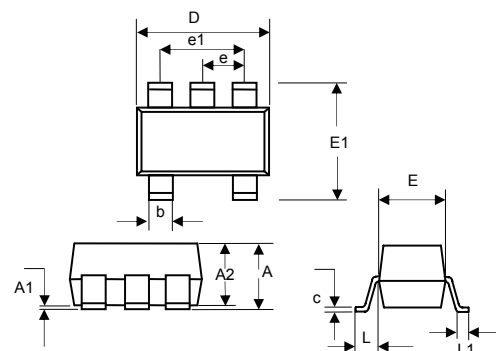
Note 2. Only 1 Diode under Power. For All 4 Diodes under Power, PD Will Be 25%. Mounted on FR-4 Board with Min Pad.

Internal Structure



ESD Protection Device

SOT-353



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.043	0.90	1.10	
A1	-----	0.004	-----	0.10	
A2	0.035	0.039	0.90	1.00	
b	0.006	0.014	0.15	0.35	
c	0.003	0.006	0.08	0.15	
D	0.790	0.087	2.00	2.20	
E	0.045	0.053	1.15	1.35	
E1	0.085	0.096	2.15	2.45	
e	0.026		0.650		TYP.
e1	0.047	0.055	1.20	1.40	
L	0.021		0.525		TYP.
L1	0.010	0.018	0.26	0.46	

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6		7.2	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$			2	μA
Forward Voltage	V_F	$I_F = 200\text{mA}$			1.25	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}, t_p = 8/20\mu\text{s}$			12.5	V
Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$		90		pF

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

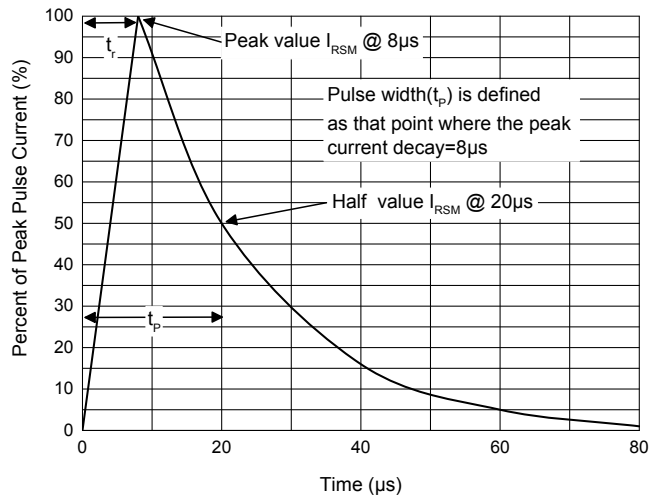


Fig. 2 - Pulse Derating Curve

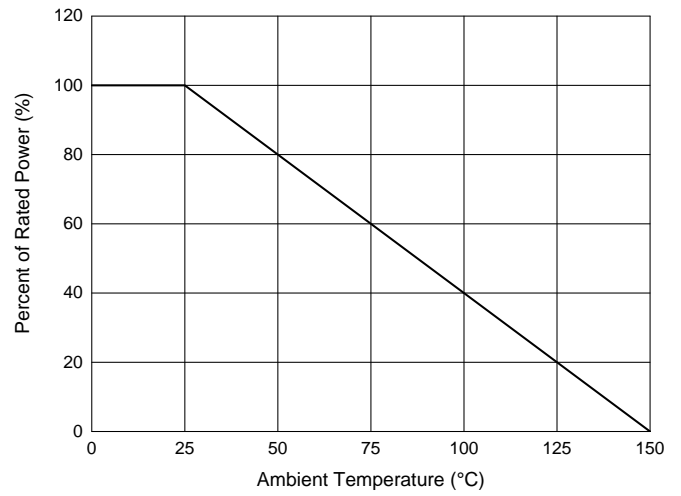
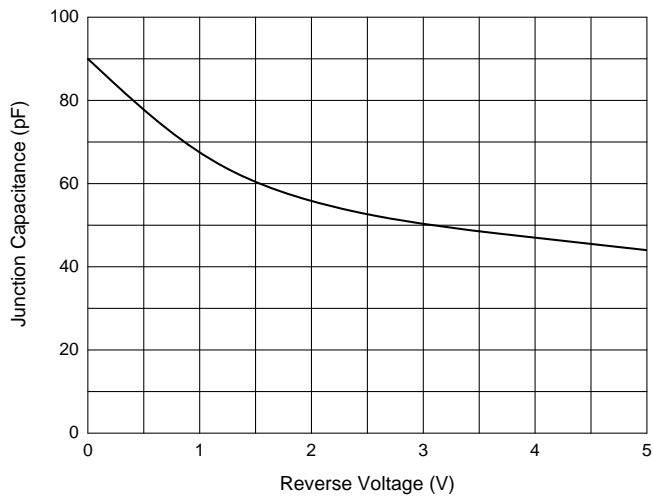


Fig. 3 - Capacitance Characteristics



Ordering Information

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

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