



Shanghai Minyue
Semiconductors Co.,Ltd
Tel:0086-21-57159233
Fax:0086-21-60415325

ESD5V0J4

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

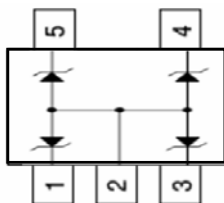
Maximum Ratings

- 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(Note 1)	Pd	150	mw
Peak Power Dissipation@8/20us	Ppk	200	W

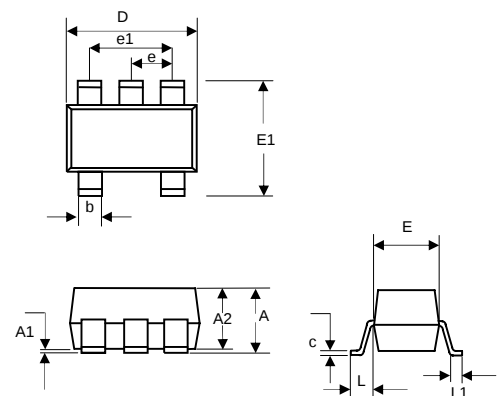
1.Only 1 diode under power. For all 4 diodes under power,
PD will be 25%. Mounted on FR--4 board with min pad.

Pin Configuration



5 Volts ESD Protection Devices

SOT-353



DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.035	.043	0.90	1.10
A1	.00	.004	.00	.100
A2	.035	.039	.900	1.00
b	.006	.014	.150	.350
c	.003	.006	.080	.150
D	.079	.087	2.0	2.2
E	.045	.053	1.15	1.35
E1	.085	.096	2.15	2.45
e	.026 TYP		.650 TYP	
e1	.047	.055	1.2	1.4
L	.021 REF		.525 REF	
L1	.010	.018	.260	.460

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted, $V_F = 0.9\text{ V Max.}$ @ $I_F = 10\text{mA}$ for all types)

Device*	Device Marking	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T		I_T	V_F (V) @ $I_F=200\text{mA}$	V_C (V) @ $\text{Max } I_{PP}=5\text{A}$	C (pF)
		Max	Max	Min	Max	mA	Max	Max	Typ
ESD5V0J4	12	5.0	5	6.0	7.2	1.0	1.25	12.5	90

TYPICAL CHARACTERISTICS

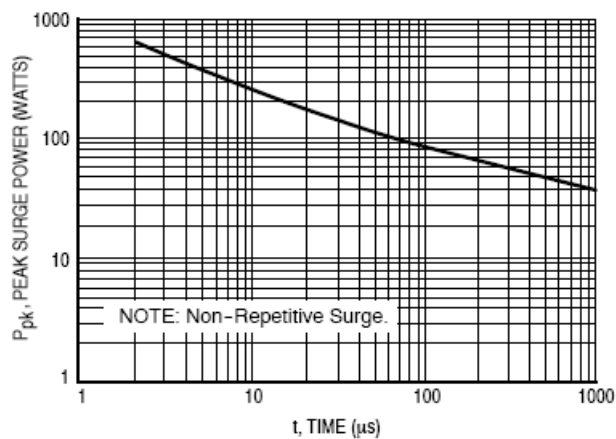


Figure 1. Pulse Width

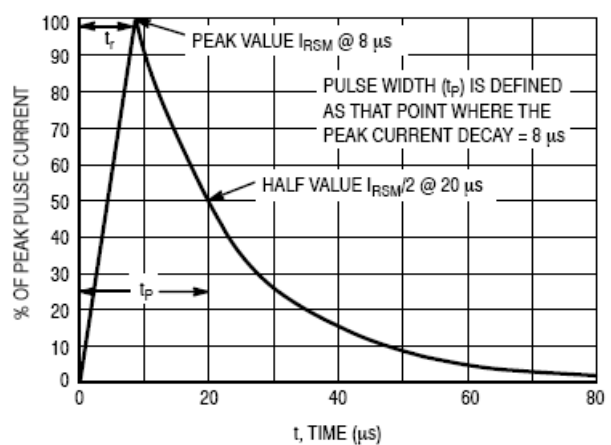


Figure 2. $8 \times 20\text{ }\mu\text{s}$ Pulse Waveform

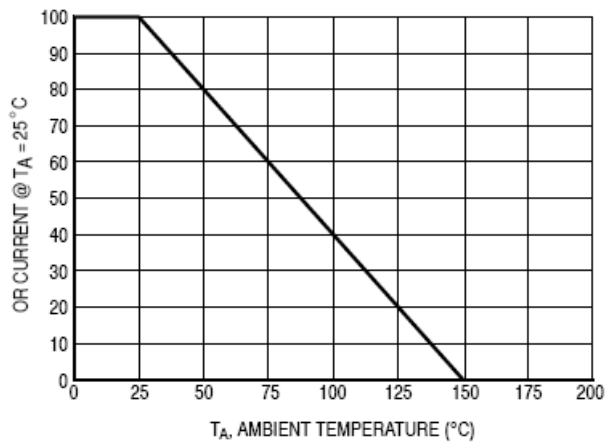


Figure 3. Pulse Derating Curve

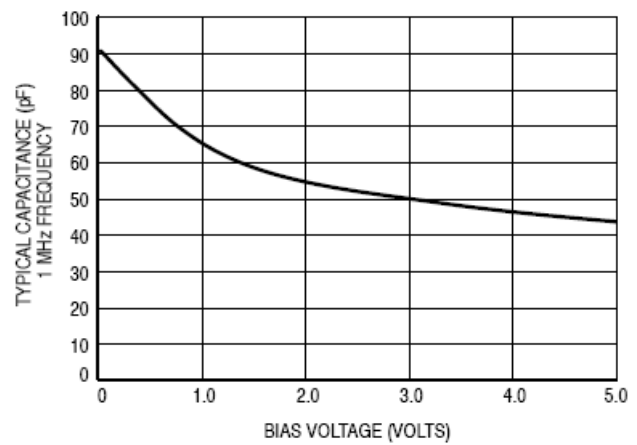


Figure 4. Capacitance

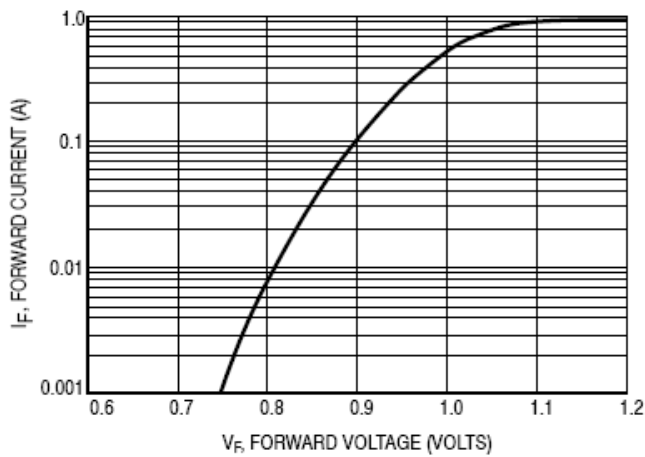


Figure 5. Forward Voltage

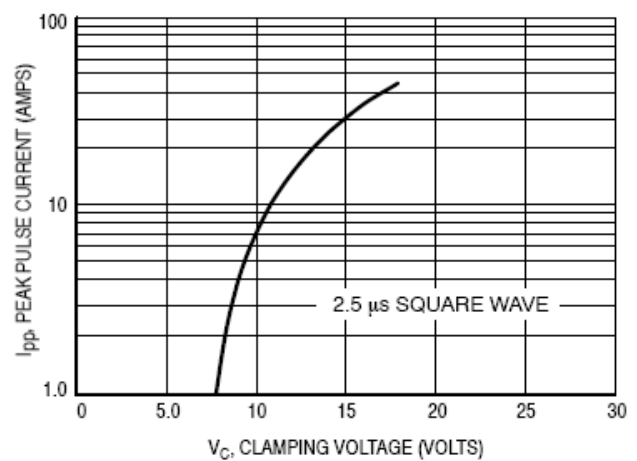


Figure 6. Clamping Voltage versus Peak Pulse Current (Reverse Direction)

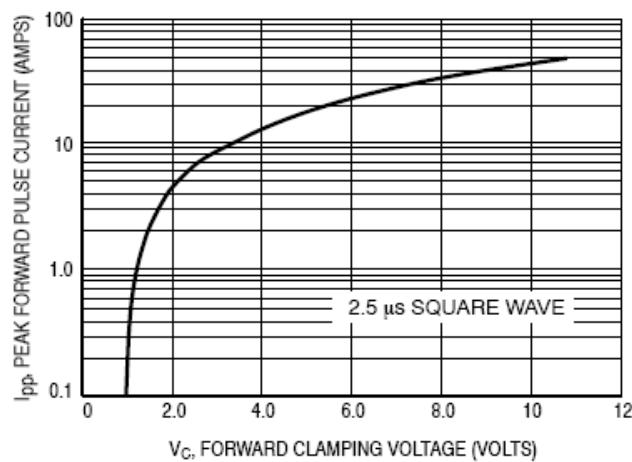


Figure 7. Clamping Voltage versus Peak Pulse Current (Forward Direction)