



Micro Commercial Components

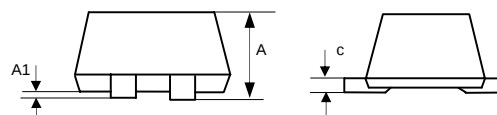
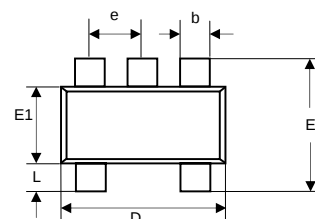


Micro Commercial Components
20736 Marilla Street Chatsworth
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ESD5V0L4

5 Volts ESD Protection Device

SOT-553



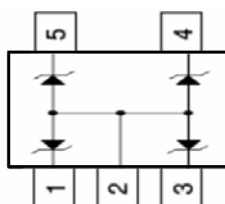
Maximum Ratings

- Operating Junction & Storage Temperature: -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

- 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



DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.021	.024	.525	.60
A1	.00	.002	.00	.05
e	.018	.022	.45	.55
c	.004	.006	.09	.16
D	.059	.067	1.5	1.7
b	.007	.011	.17	.27
E1	.043	.051	1.1	1.3
E	.059	.067	1.5	1.7
L	.004	.012	.100	.300



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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 ($\mu\text{ A}$) @ V_{RWM}	V_{BR} (V) @ I_T		I_T	V_F (V) @ $I_F=200\text{ mA}$	V_C (V) @Max $I_{PP}=1\text{ A}$	V_C (V) @Max $I_{PP}=5\text{ A}$	C (pF)
		Max	Max	Min	Max	mA	Max	Max	Max	Max
ESD5V0L4	42	5.0	5	6.0	7.2	1.0	1.25	10.5	13.5	80

1. Non-repetitive current per Figure 1. Derate per Figure 2.

TYPICAL CHARACTERISTICS

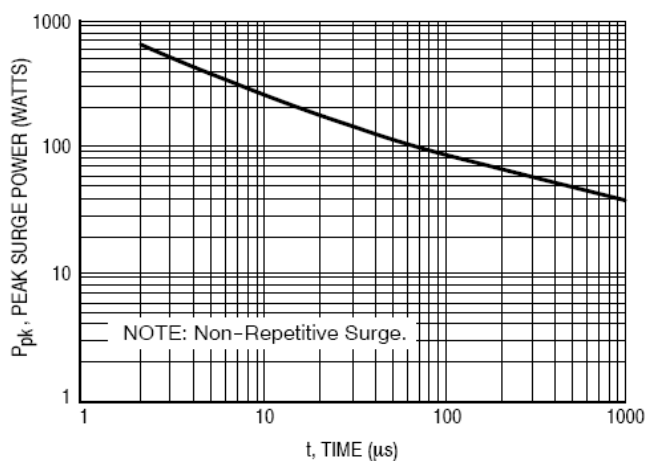


Figure 1. Pulse Width

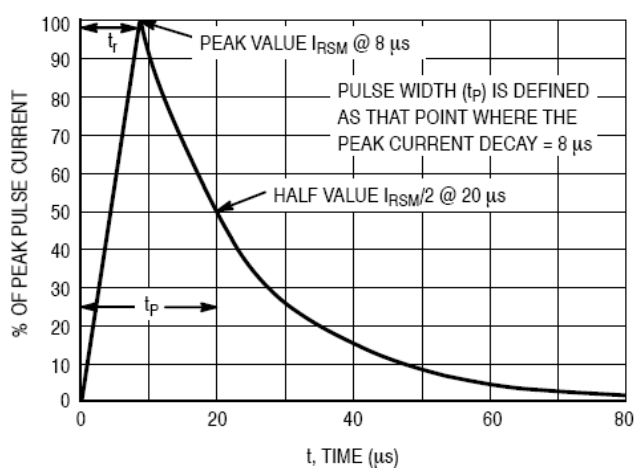


Figure 2. $8 \times 20\text{ }\mu\text{s}$ Pulse Waveform

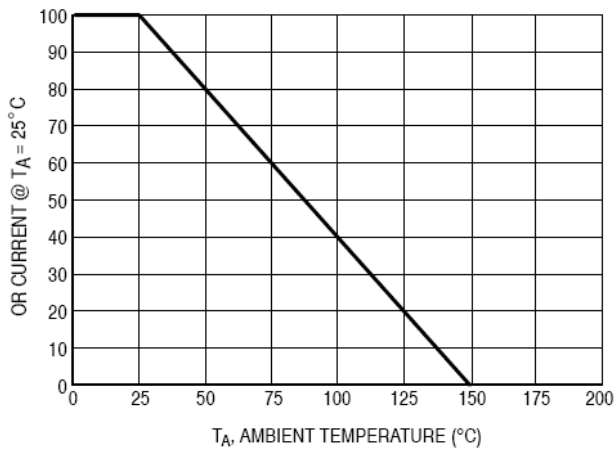


Figure 3. Pulse Derating Curve

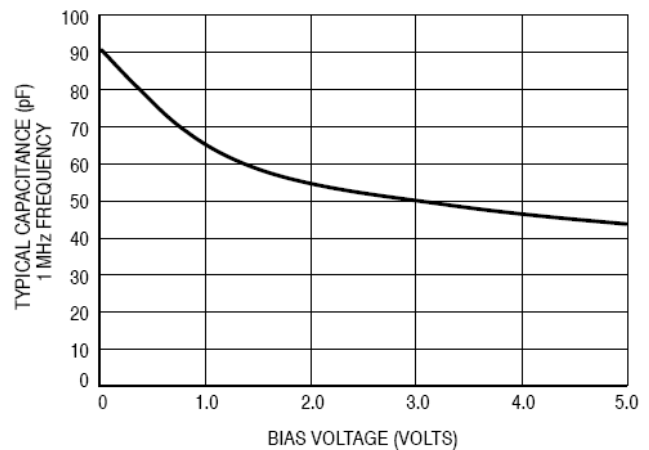


Figure 4. Capacitance

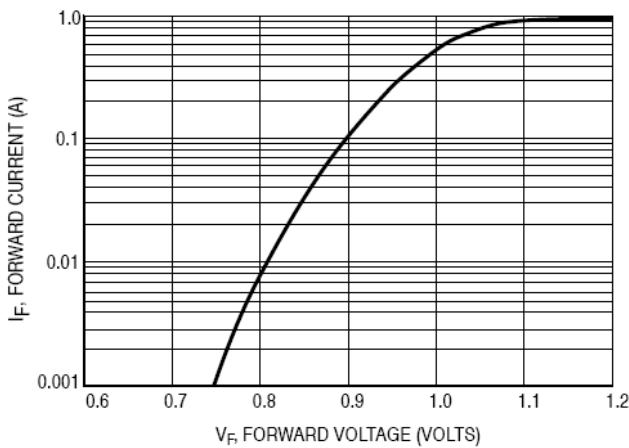


Figure 5. Forward Voltage

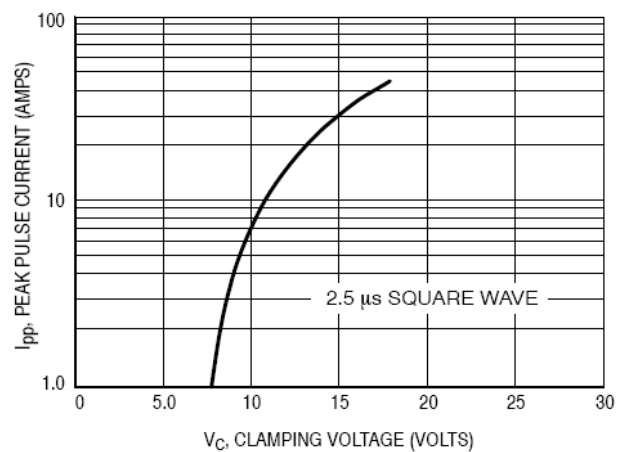


Figure 6. Clamping Voltage versus Peak Pulse Current (Reverse Direction)

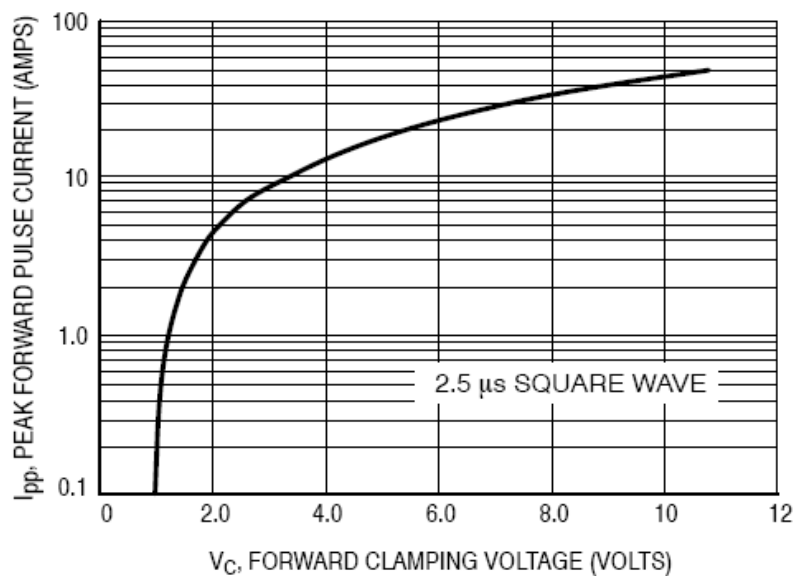


Figure 7. Clamping Voltage versus Peak Pulse Current (Forward Direction)



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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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