

## Excellent Integrated System Limited

Stocking Distributor

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[Micro Commercial Components \(MCC\)](#)  
[ESD5V0J4-TP](#)

For any questions, you can email us directly:

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Micro Commercial Components

Micro Commercial Components  
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## Features

- Halogen free available upon request by adding suffix "-HF"
- 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

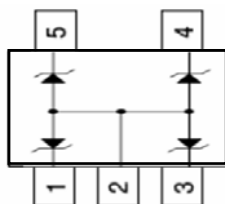
## Maximum Ratings

- Operating Junction & 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

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

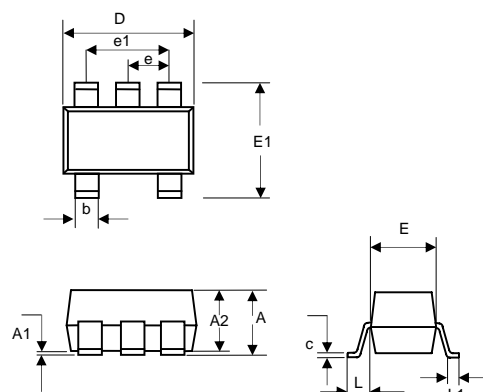
## Pin Configuration



## ESD5V0J4

## 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

**M.C.C.**

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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 $I_{pp}=5\text{ A}$	C (pF)
		Max	Max	Min	Max	mA	Max	Max	Typ
ESD5V0J4	12	5.0	2	6.0	7.2	1.0	1.25	12.5	90

**TYPICAL CHARACTERISTICS**

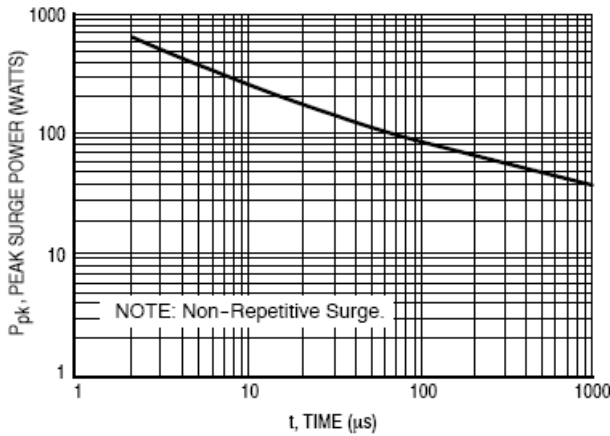


Figure 1. Pulse Width

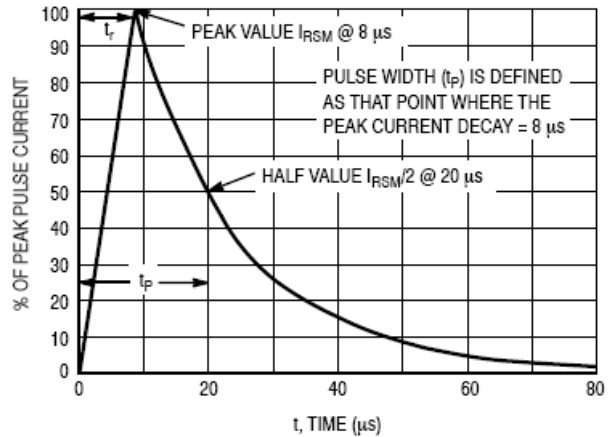
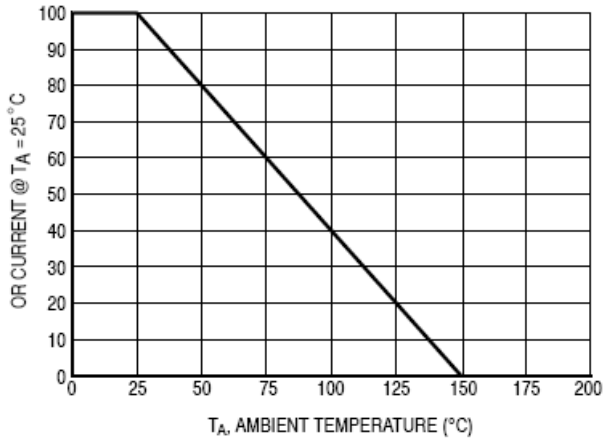


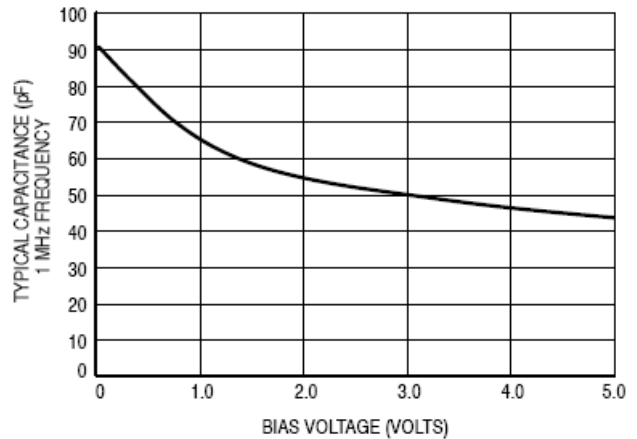
Figure 2.  $8 \times 20\ \mu\text{s}$  Pulse Waveform



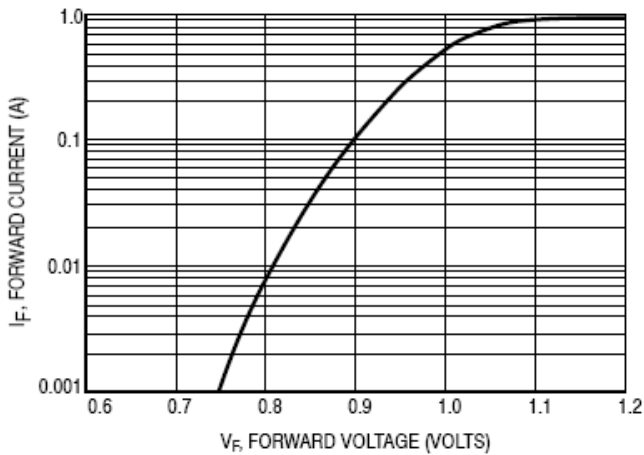
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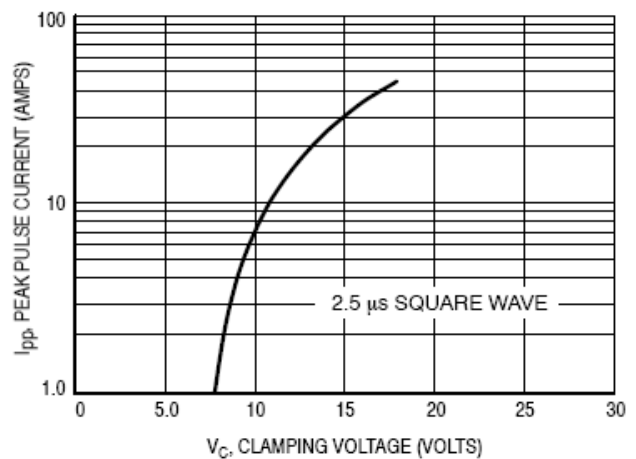
**Figure 3. Pulse Derating Curve**



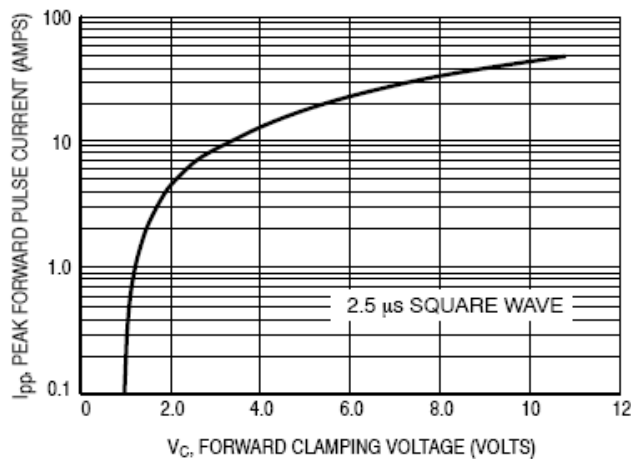
**Figure 4. Capacitance**



**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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