



Micro Commercial Components

Micro Commercial Components  
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# ESDLC5V0T5

## 5 Volts ESD Protection Devices

### SOT-523

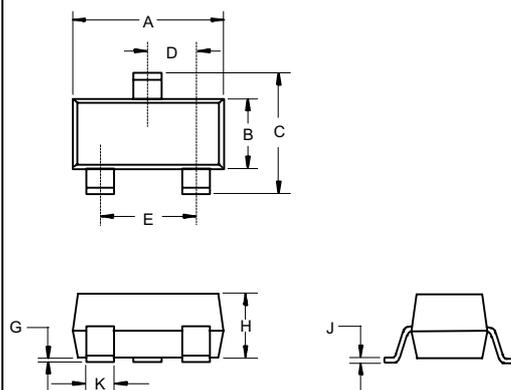
### Features

- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- Working voltage: 5V
- For space saving application
- Fast response ,response time less than 1ns.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensivity Level 1

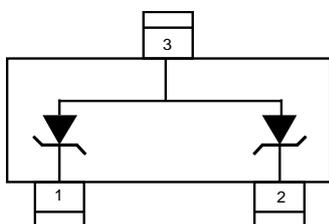
### Maximum Ratings

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

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		$\pm 15$ $\pm 8$	KV
Peak Power Dissipation@8/20us	Ppk	125	W



### Pin Configuration



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

**Electrical characteristics per line @25 °C ( unless otherwise specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_t = 1mA$	5.6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A, t_P = 8/20\mu s$ pin1 to pin2			13.5	V
Clamping Voltage	$V_C$	$I_{PP} = 5A, t_P = 8/20\mu s$ pin1 or pin2 to pin3			20.0	V
Clamping Voltage	$V_C$	$I_{PP} = 5A, t_P = 8/20\mu s$ pin1 to pin2			23.0	V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$ Pin1 to Pin2		1.4	2	pF
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$ pin1 or pin2 to pin3		2.8	3.5	pF

**Typical Characteristics**

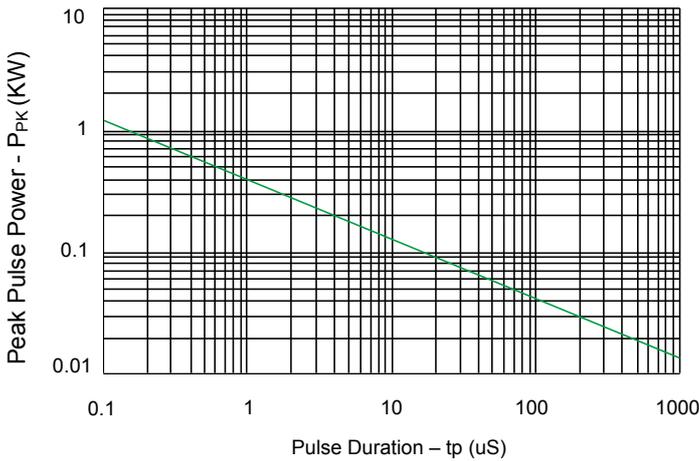


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

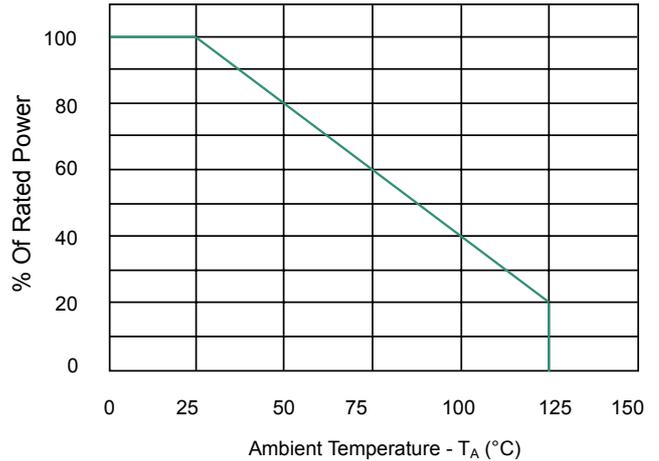


Fig2. Power Derating Curve

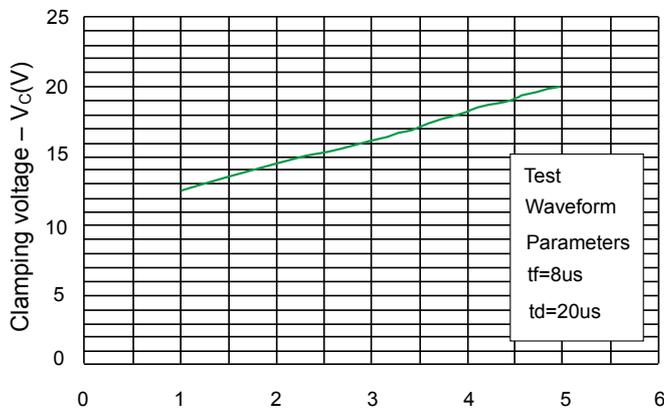


Fig 3. Clamping Voltage vs. peak Pulse Current (Pin 1 to Pin 2)

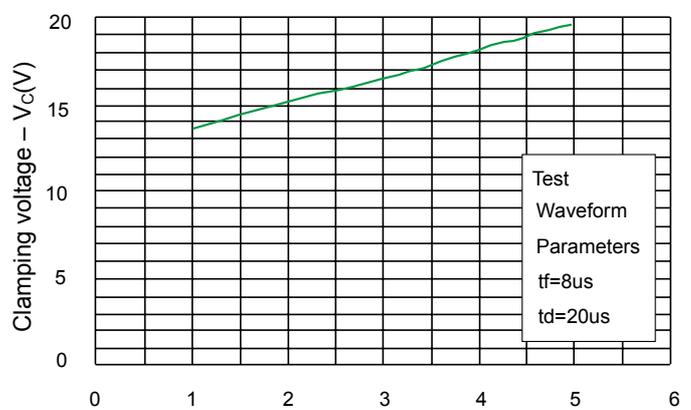


Fig 4. Clamping Voltage vs. peak Pulse Current (Pin 1 or Pin 2 to Pin 3)



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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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