Micro Commercial Components

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ESDLC5V0T7

5V Low Capacitance ESD Protection Device

Features

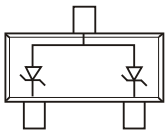
- Halogen free available upon request by adding suffix "-HF"
- SOT-723 package
- Low clamping voltage
- Low leakage current
- Working voltage: 5V
- Protect up two data lines
- 110 watts peak pulse power(tp=8/20us)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

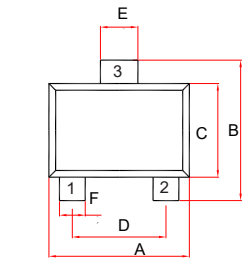
- Operating Junction &StorageTemperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±15 ±8	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power (t_p=8/20μS)	Ppp	110	W
Peak Pulse Current (t_p=8/20μS)	I_{pp}	5.5	A

Pin Configuration-Top View



SOT-723



DIMENSIONS					
			MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	. 045	.049	1.15	1.25	
B	. 045	.049	1.15	1.25	
C	. 0 30	.033	0.75	0.85	
D	.031TYP.		0.80TYP.		
E	.011	.015	0.27	0.37	
F	.007	.011	0.17	0.27	
G	.000	.002	.000	.050	
H	.017	.020	0.43	0.50	
J	.003	.006	.080	.150	

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

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	μA
Clamping Voltage	V_C	I_{PP} = 1A, t_P = 8/20μs pin1 to pin2			13.5	V
Clamping Voltage	V_C	I_{PP}= 5A, t_P = 8/20μs pin1to pin2			23.0	V
Clamping Voltage	V_C	I_{PP}= 5A, t_P = 8/20μs pin1or pin2 to pin3			20.0	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 pin1or pin2 to pin3		2.8	3.5	pF

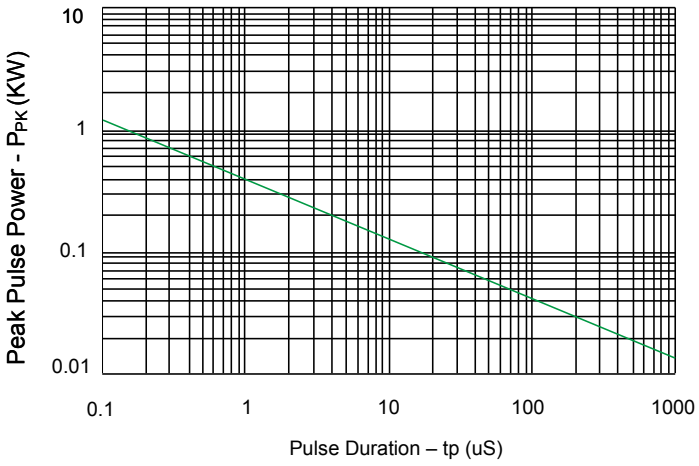


Fig1.Non-Repetitive Peak Pulse Power vs. Pulse time

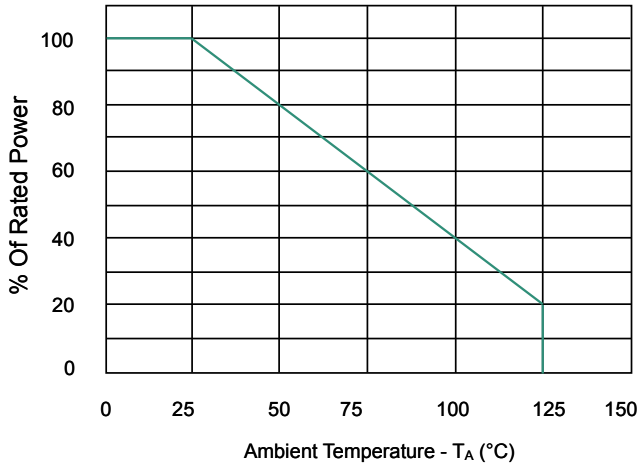


Fig2. Power Derating Curve

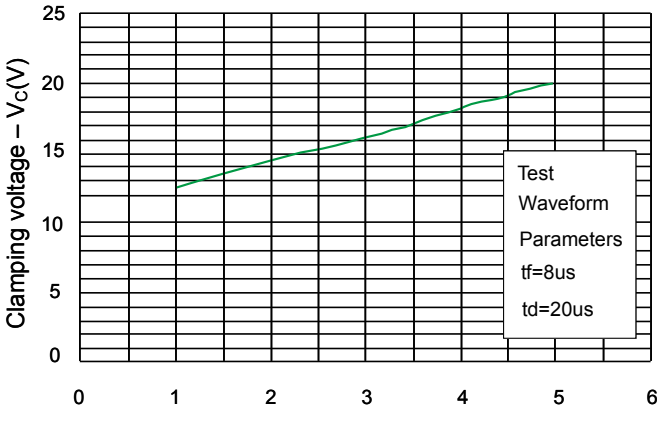


Fig 3.Clamping Voltage vs. peak Pulse Current
(Pin 1 to Pin 2)

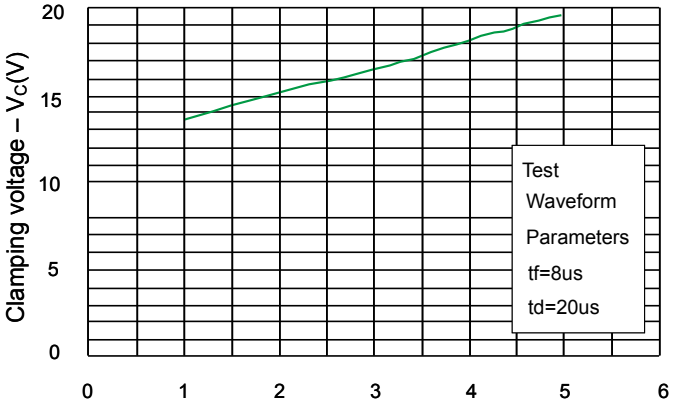


Fig.4 Clamping Voltage vs. peak Pulse Current
(Pin 1 or Pin 2 to Pin 3)

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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

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