

SR70

70 Volts ESD Protector

Features

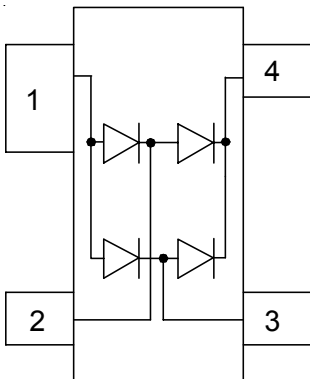
- Halogen free available upon request by adding suffix "-HF"
- IEC 61000-4-5(Lightning) 1kv,24A(8/20us)
- IEC 61000-4-2(ESD) 15kv(air), 8kv(contact)
- Low Clamping Voltage
- Unidirectional Configuration
- Protects 2 I/O Ports & Power Supply
- Low Capacitance
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

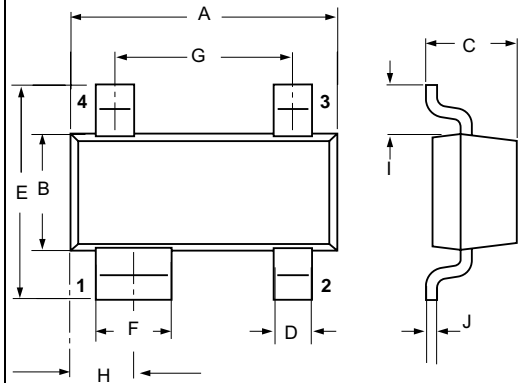
- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
Peak Pulse Current ($t_p=8/20\mu S$)	I_{pp}	24	A
Rectifier Repetitive Peak Reverse Voltage	V_{RRM}	70	V

Pin Configuration



SOT-143



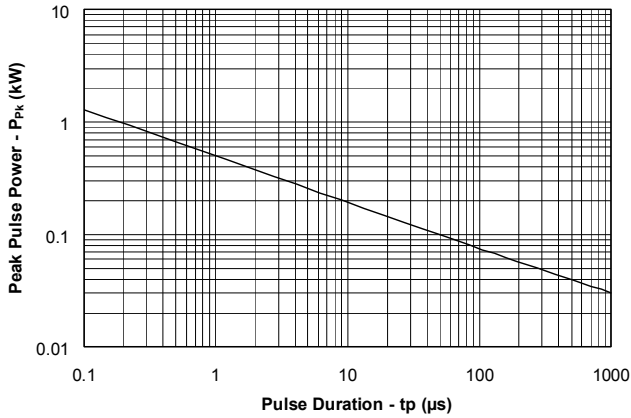
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.110	.120	2.80	3.04	
B	.047	.055	1.20	1.39	
C	.033	.045	0.84	1.14	
D	.015	.020	0.39	0.50	
E	.083	.098	2.11	2.48	
F	.031	.037	0.79	0.93	
G	.070	.080	1.78	2.03	
H	.028	.033	0.72	0.83	
I	.018	.024	0.46	0.60	
J	.003	.006	0.08	0.15	

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

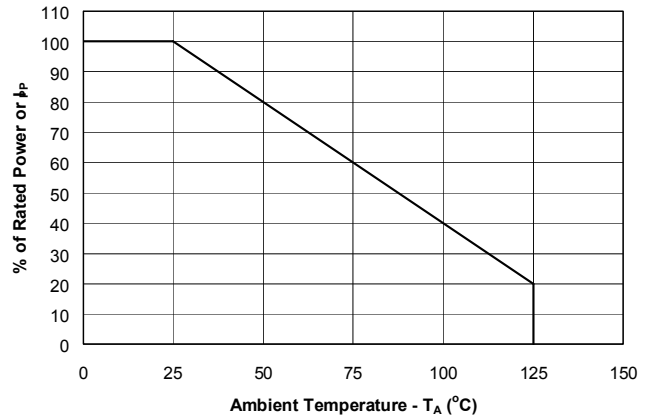
SR70						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Peak Reverse Stand-Off Voltage	V_{RRM}				70	V
Reverse Breakdown Voltage	V_{BR}	$I_t = 50\mu A$	85			V
Reverse Leakage Current	I_R	$V_{RWM} = 70V, T=25^\circ C$			5	μA
Forward Clamping Voltage	V_{FC}	$I_{PP} = 1A, t_p = 8/20\mu s$			1.5	V
Forward Clamping Voltage	V_{FC}	$I_{PP} = 10A, t_p = 8/20\mu s$			3.3	V
Forward Clamping Voltage	V_{FC}	$I_{PP} = 24A, t_p = 8/20\mu s$			7	V
Junction Capacitance	C_j	Between I/O pins and Ground $V_R = 0V, f = 1MHz$		5	10	pF
		Between I/O pins $V_R = 0V, f = 1MHz$		3		pF

Typical Characteristics

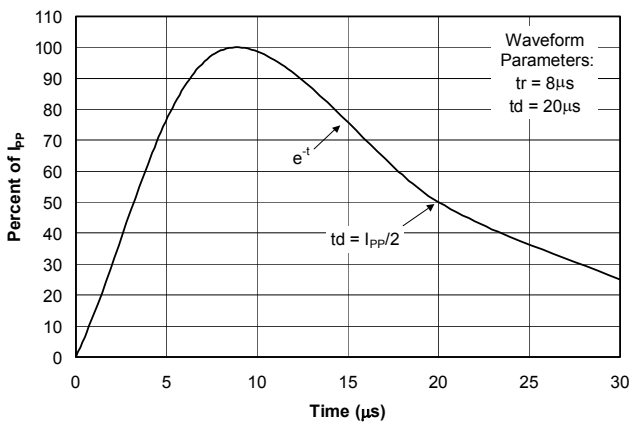
Non-Repetitive Peak Pulse Power vs. Pulse Time



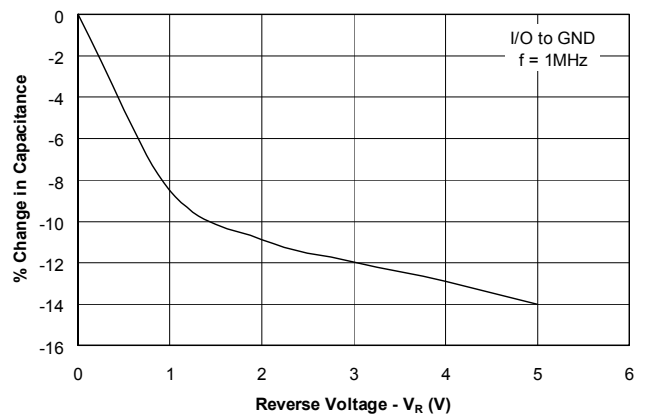
Power Derating Curve



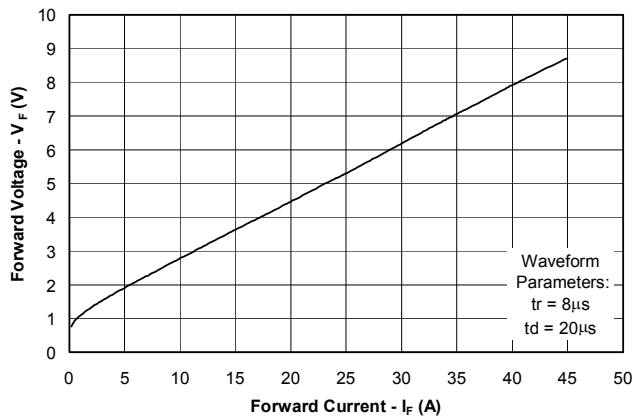
Pulse Waveform



Capacitance vs. Reverse Voltage



Forward Voltage vs. Forward Current





Micro Commercial Components

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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