



**Micro Commercial Components** 

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## **SR70**

## **Features**

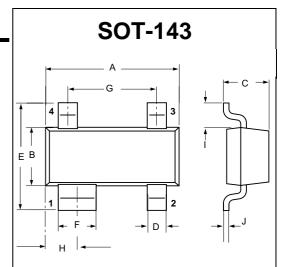
- IEC 61000-4-5(Lightning) 1kv,24A( 8/20us)
- IEC 61000-4-2(ESD) 15kv(air), 8kv(contact)
- Low Clamping Voltage
- **Unidirectional Configuration**
- Protects 2 I/O Ports & Power Supply
- Low Capacitance
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

# **Maximum Ratings**

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

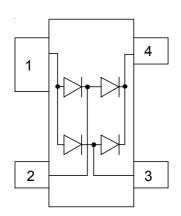
Parameter	Symbol	Limits	unit
Peak Pulse Current ( $t_p$ =8/20 $\mu\mathrm{S}$ )	I <sub>pp</sub>	24	Α
Rectifier Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	70	V

## 70 Volts **ESD Protector**



DIMENSIONS					
	INCHES		M		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.110	.120	2.80	3.04	
В	.047	.055	1.20	1.39	
С	.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	
Н	.028	.033	0.72	0.83	
I	.018	.024	0.46	0.60	
J	.003	.006	0.08	0.15	

# **PinConfiguration**





## Electrical characteristics per line@25℃(unless otherwise specified)

SR70						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Peak Reverse Stand-Off Voltage	V <sub>RRM</sub>				70	V
Reverse Breakdown Voltage	$V_{_{BR}}$	I <sub>t</sub> = 50μΑ	85			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 70V, T=25°C			5	μΑ
Forward Clamping Voltage	V <sub>FC</sub>	$I_{pp} = 1A, t_p = 8/20 \mu s$			1.5	V
Forward Clamping Voltage	V <sub>FC</sub>	$I_{pp} = 10A, t_{p} = 8/20 \mu s$			3.3	V
Forward Clamping Voltage	V <sub>FC</sub>	$I_{pp} = 24A, t_p = 8/20\mu s$			7	V
Junction Capacitance	C <sub>j</sub>	Between I/O pins and Ground V <sub>R</sub> = OV, f = 1MHz		5	10	pF
		Between I/O pins V <sub>R</sub> = OV, f = 1MHz		3		рF

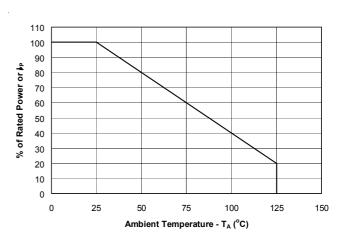
## **Typical Characteristics**



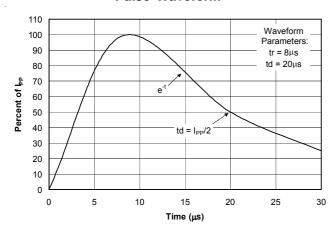
### Non-Repetitive Peak Pulse Power vs. Pulse Time

# 0.01 0.01 0.1 1 10 100 1000 Pulse Duration - tp (µs)

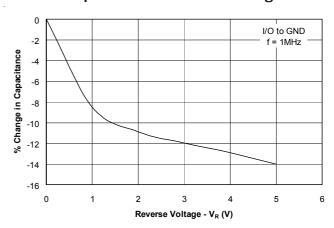
## **Power Derating Curve**



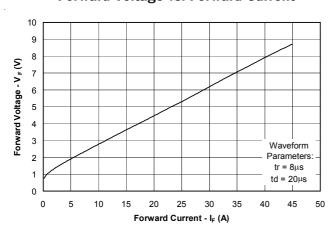
#### **Pulse Waveform**



## Capacitance vs. Reverse Voltage



#### Forward Voltage vs. Forward Current





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## **Ordering Information:**

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

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