

Features

- Protects 2 I/O Ports & Power Supply
- Unidirectional Configuration
- Low Capacitance
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

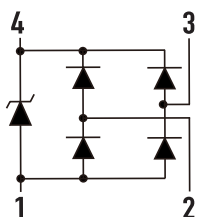
Maximum Ratings

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

MCC Part Number	Device Marking
ESD5V0T143-4U	R05A

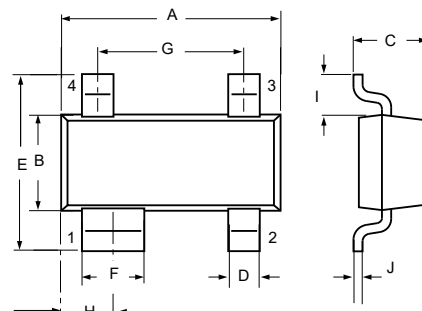
Peak Pulse Power (8/20us)	P _{PK}	500W

Internal Structure



ESD Protection Device

SOT-143



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.047	0.055	1.20	1.39	
C	0.031	0.048	0.80	1.22	
D	0.011	0.020	0.30	0.51	
E	0.082	0.104	2.10	2.64	
F	0.029	0.037	0.76	0.94	
G	0.070	0.080	1.78	2.03	
H	0.028	0.033	0.72	0.83	
I	0.015	0.024	0.40	0.60	
J	0.003	0.008	0.08	0.20	

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

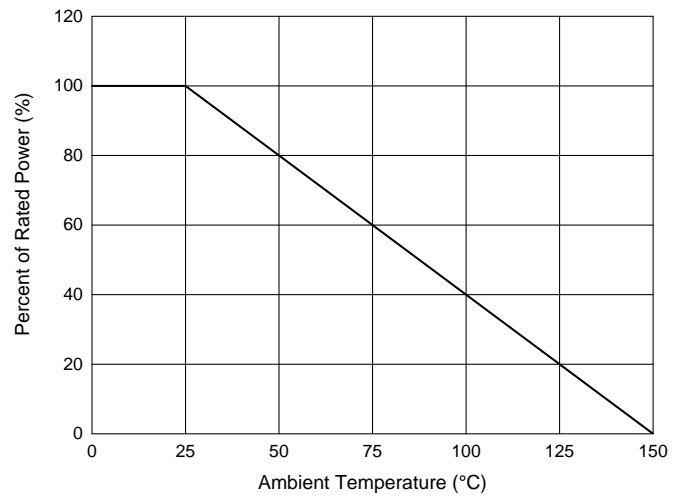
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM}=5V$			5	μA
Forward Voltage	V_F	$I_F=1A$			1.5	V
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$			9.8	V
Clamping Voltage	V_C	$I_{PP}=28A, t_p=8/20\mu s$			20	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		3		pF

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform



Fig. 2 - Pulse Derating Curve



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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