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Features

Ultra low leakage: nA level

Operating voltage: 5V

Low clamping voltage

Complies with following standards:

- IEC 61000-4-2 (ESD) immunity test

Air discharge: ±30kV Contact discharge: ±30kV

- IEC61000-4-4 (EFT) 40A (5/50ns)

-IEC61000-4-5 (Lightning) 6A (8/20μs)

RoHS Compliant

Mechanical Characteristics

Package: SOT-143

• Lead Finish: Matte Tin

• UL Flammability Classification Rating 94V-0



Applications

• USB 2.0 power and data line

Set-top box and digital TV

Digital video interface (DVI)

Notebook Computers

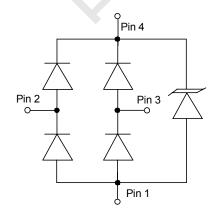
SIM Ports

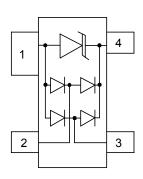
10/100 Ethernet

Ordering Information

Part Number	Qty per Reel	Reel Size	
SR05	3000	7"	

Dimensions and Pin Configuration







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Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20µs)	Ppk	150	W
Peak Pulse Current (8/20µs)	Ірр	6	Α
ESD per IEC 61000-4-2 (Air)	\/505	±30	kV
ESD per IEC 61000-4-2 (Contact)	VESD	±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Breakdown Voltage	VBR	6			٧	IT = 1mA
Reverse Leakage Current	I _R			0.1	uA	VRWM =5V
Clamping Voltage	Vc			15	V	IPP = 1A (8 x 20μs pulse)
Clamping Voltage	Vc			25	V	IPP = 6A (8 x 20 □ s pulse)
Junction Capacitance	Сл		0.3	0.5	pF	VR = 0V, f = 1MHz



SR05 Low Capacitance TVS Diode Array

PROTECTION PRODUCTS
Typical charateristics

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Fig1. 8/20 µs Pulse Waveform

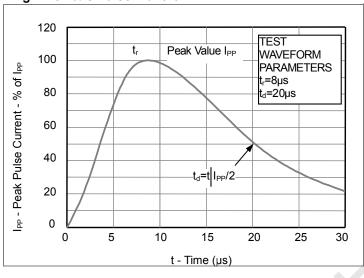


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

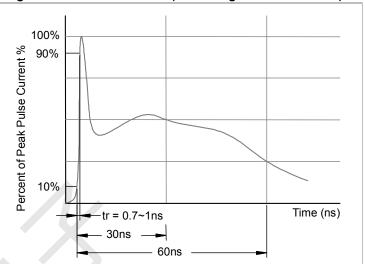
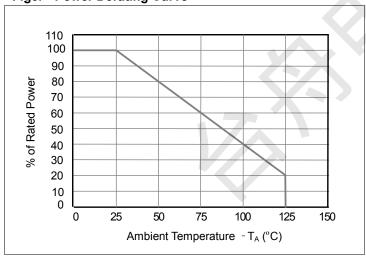


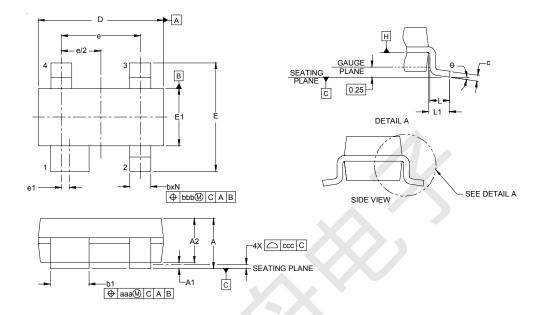
Fig3. Power Derating Curve





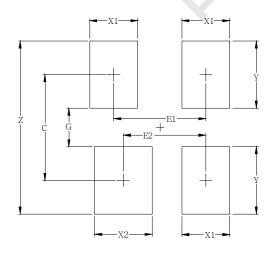
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Outline Drawing - SOT-143



DIMENSIONS							
DIM	INCHES		MILLIMETERS				
DIIVI	MIN	NOM	MAX	MIN	NOM	MAX	
Α	.031	-	.048	0.80	-	1.22	
A1	.000	-	.006	0.013	-	0.15	
A2	.029	.035	.042	0.75	0.90	1.07	
b	.011	-	.020	0.30	-	0.51	
b1	.029	-	.037	0.76	-	0.94	
С	.003	-	.008	0.08	-	0.20	
D	.110	.114	.120	2.80	2.90	3.04	
Е	.082	.093	.104	2.10	2.37	2.64	
E1	.047	.051	.055	1.20	1.30	1.40	
е	.075				1.92 BSC		
e1	.008		0	.20 BS	С		
L	.015	.020	.024	0.40	0.50	0.60	
L1	(.021)		(.021) (0.54)				
N	4						
0	0°	-	8°	0°	-	8°	
aaa	.006						
bbb	.008			0.20			
CCC		004			0.10		

Land Pattern -SOT-143



SYM	DIMENSIONS			
	MILLIMETERS	INCHES		
С	2.20	0.087		
E1	1.92	0.076		
E2	1.72	0.068		
G	0.80	0.031		
X1	1.00	0.039		
X2	1.20	0.047		
Y	1.40	0.055		
Z	3.60	0.141		