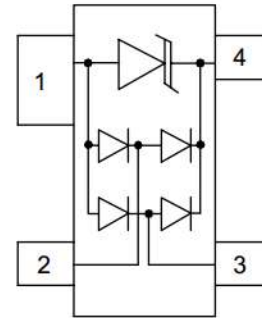


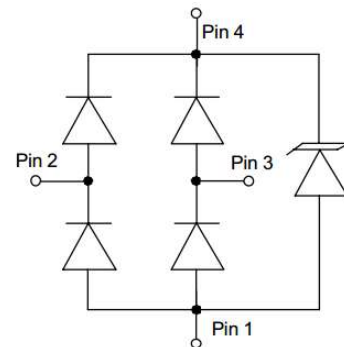
Features

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 20A (8/20 μs)
- RoHS Compliant

Dimensions SOT-143



Pin Configuration



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

Mechanical Characteristics

- Package: SOT-143
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000 pcs
- Reel Size: 7 inch

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	500	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 30	Kv
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

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

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
SR05W	ASR05	5	6	1	9	20	20	0.5	3

Characteristic Curves

Fig1. 8/20μs Pulse Waveform



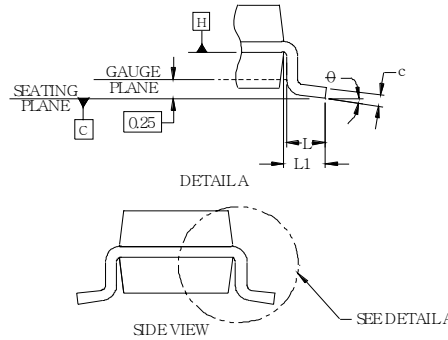
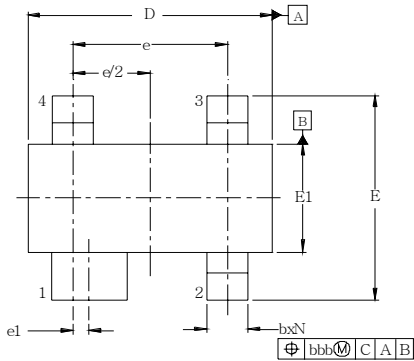
Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



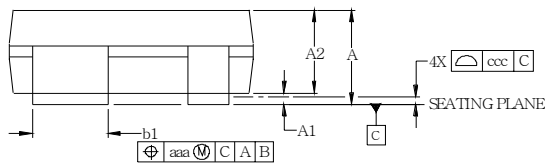
Fig3. Power Derating Curve



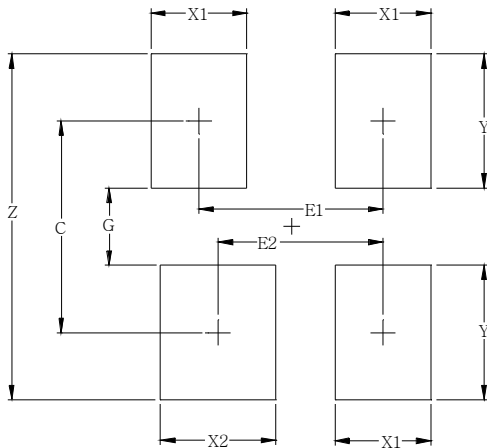
SOT-143 Package Outline Drawing



DIM	INCHES		MILLIMETERS	
	MIN	NOM	MIN	NOM
A	.031	-.048	0.80	1.22
A1	.000	-.006	0.013	-.15
A2	.029	.035	.042	0.75
b	.011	-.020	0.30	-.51
b1	.029	-.037	0.75	-.94
c	.003	-.008	0.08	-.20
D	.110	.114	.120	2.80
E	.082	.033	.101	2.10
E1	.047	.051	.055	1.30
e	.075		1.92	BSC
e1	.008		0.20	BSC
L	.015	.020	.024	0.40
L1		(.021)		(0.54)
N		4		4
theta	0°	4	8°	0°
aaa		.006		0.15
bbb		.008		0.20
ccc		.004		0.10



Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	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