

APPLICATIONS

- USB Power & Data Line Protection.
- Ethernet 10 BaseT.
- I²C Bus Protection.
- Video Line Protection.
- T1/E1 secondary IC Side Protection.
- ISDN S/T Interface.
- WAN/LAN Equipment.



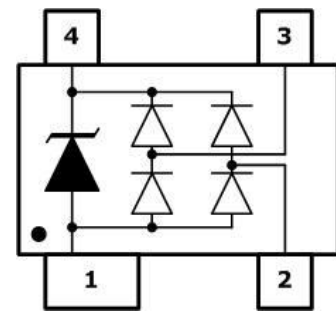
SOT-143

MECHANICAL CHARACTERISTICS

- JEDEC SOT-143 Package.
- Molding Compound Flammability Rating: UL 94V-O.
- Weight 10 Milligrams (Approximate).
- Quantity per Reel: 3000pcs.
- Reel Size: 7inch.
- Lead Finish: Lead Free.

IEC COMPATIBILITY

- IEC61000-4-2(ESD)±15KV(air), ±8KV(contact).
- IEC61000-4-5(Lightning) 5A (8/20µs).



PIN CONFIGURATION

FEATURES

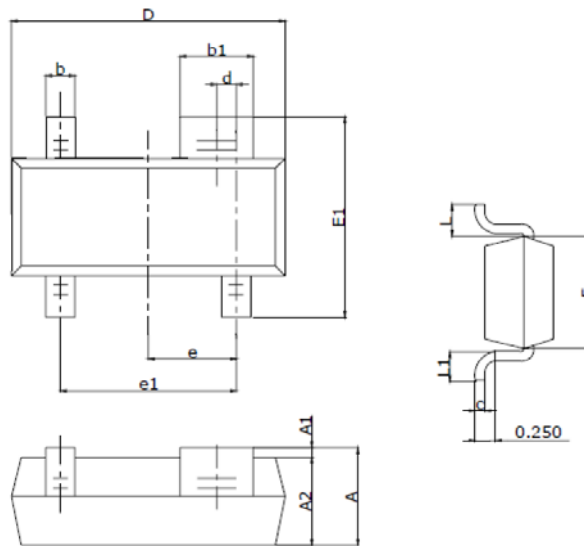
- 250 Watts Peak Pulse Power per Line (tp=8/20µs).
- Protect tow I/O lines.
- Low clamping voltage.
- Working voltages: 5V.
- Low leakage current.

DEVICE CHARACTERISTICS

ELECTRICAL CHARACTERISTICS PER LINE (@25°C Unless Otherwise Specified)										
Part Number	IDRM@VDRM		VBR@IBR		VC@IPP		VC@IPP		Co	
	uA	V	V	mA	V	A	V	A	pF	
	Max		MIN		MAX		MAX		TYP	MAX
SR05	1.0	5.0	6.0	1.0	15.0	1.0	25.0	5.0	0.85	1.20

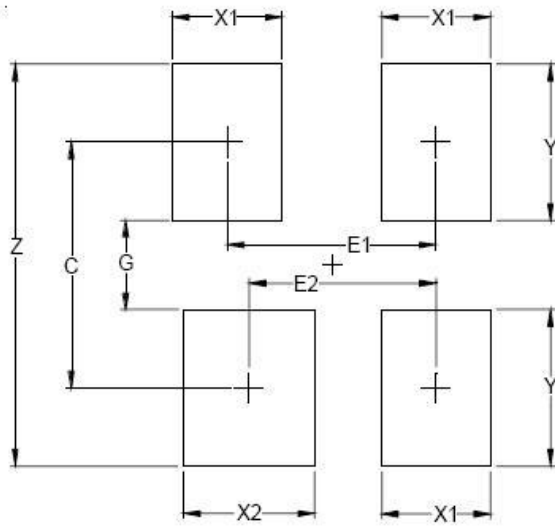
MAXIMUM RATINGS (@25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	250	Watts
Lead Soldering Temperature	T _L	260(10sec)	°C
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to + 150	°C

SOT-143 PACKAGE OUTLINE & DIMENSIONS



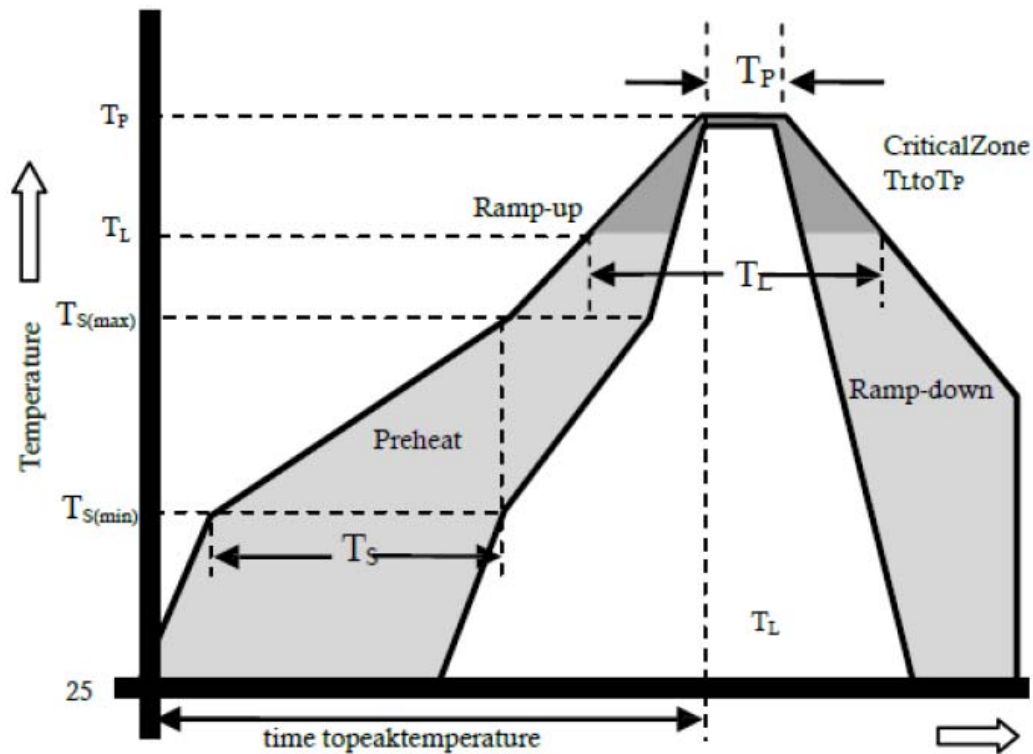
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	MIN	MAX
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
A2	0.90	1.05	0.035	0.041
b	0.30	0.50	0.012	0.020
b1	0.75	0.90	0.030	0.035
c	0.08	0.15	0.003	0.006
D	2.80	3.00	0.110	0.118
d	0.20TYP		0.008TYP	
E	1.20	1.40	0.047	0.055
E1	2.25	2.55	0.089	0.10
e	0.95TYP		0.037TYP	
e1	1.80	2.00	0.071	0.079
L	0.55REF		0.022REF	
L1	0.30	0.50	0.012	0.020

SOLDERING FOOTPRINT



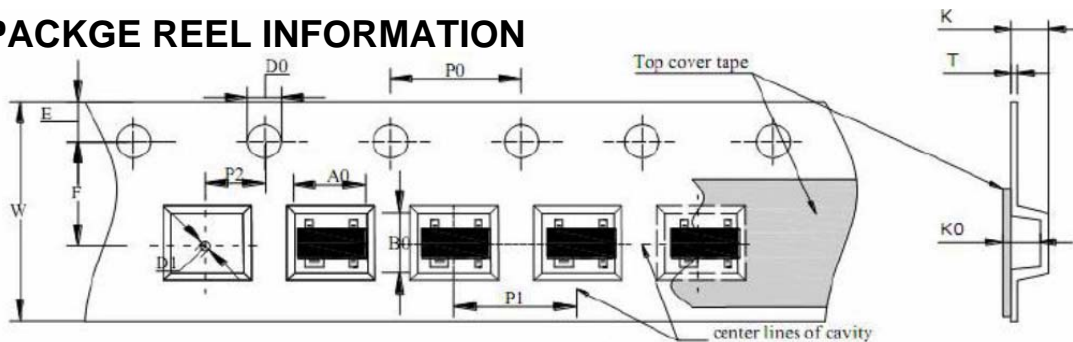
DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.087)	(2.20)
E1	.076	1.92
E2	.068	1.72
G	.031	0.80
X1	.039	1.00
X2	.047	1.20
Y	.055	1.40
Z	.141	3.60

REFLOW PROFILE



Reflow Condition		Pb-Free Assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time (Min to Max)	20 - 80 secs
Average ramp up rate (Liquid) Temperature (T _L) to peak		3°C/s Max.
T _S (Max) to T _I -Ramp-up Rate		3°C/s Max.
Reflow	-Temperature (T _L)(Liquid)	217°C
	-Temperature (T _L)	60 - 150 secs
Peak Temperature (T _P)		(260+0/-5)°C
Time within 5°C of actual Peak Temperature (T _P)		8- 15 secs
Ramp-down Rate		6°C/s Max.
Time 25°C to peak Temperature(T _P)		8 min Max
Do not exceed		260°C

PACKAGE REEL INFORMATION



Symbol	P0	P1	D0	D1	E	F	K	T	W
Dimensions In Millimeters	4.00	4.00	1.50	1.00	1.75	3.50	1.00	0.20	8.00

OUTLINE	Reel(PCS)
Taping	3000