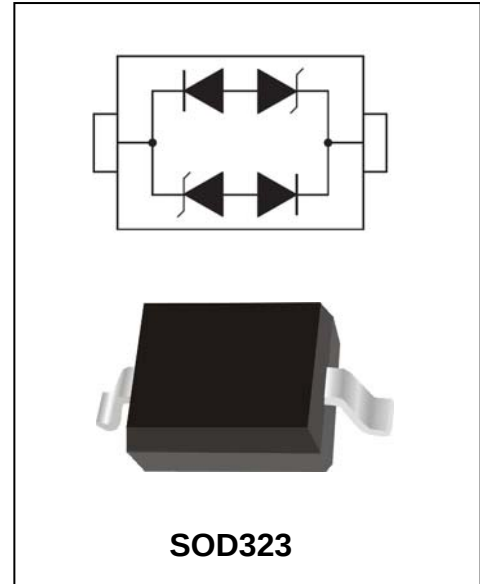


Features

- ◆ 150 Watts peak pulse power ($t_p = 8/20\mu s$)
- ◆ Transient protection for high speed data lines to IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ Protects One Power or I/O Port
- ◆ Low capacitance
- ◆ Low leakage current
- ◆ Low operating and clamping voltages
- ◆ Solid-state silicon avalanche technology



Applications

- ◆ Ethernet - 10/100/1000 Base T
- ◆ Cellular Phones
- ◆ Handheld - Wireless Systems
- ◆ Personal Digital Assistant (PDA)
- ◆ USB Interface

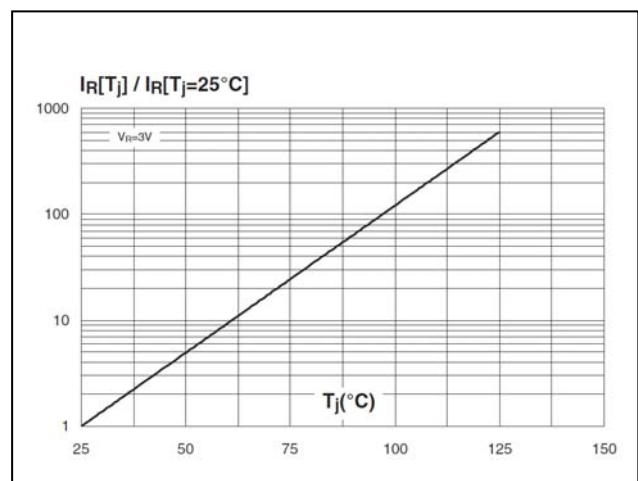
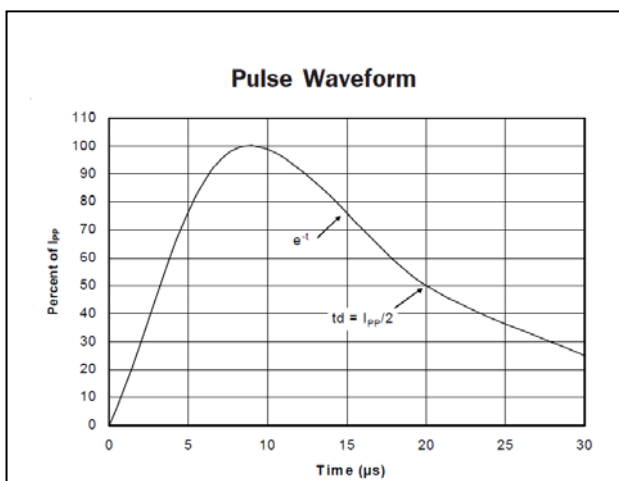
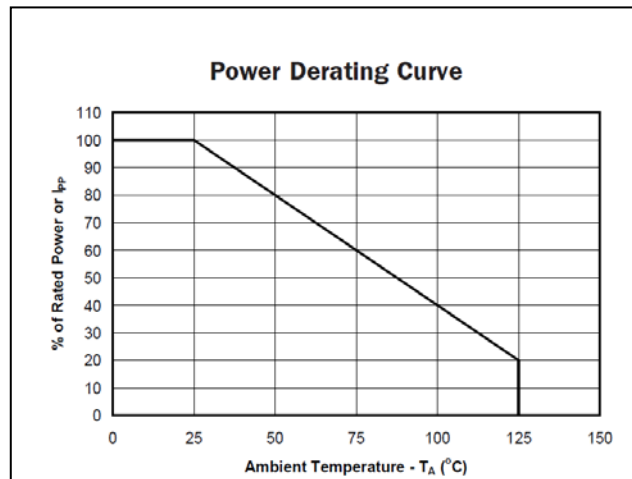
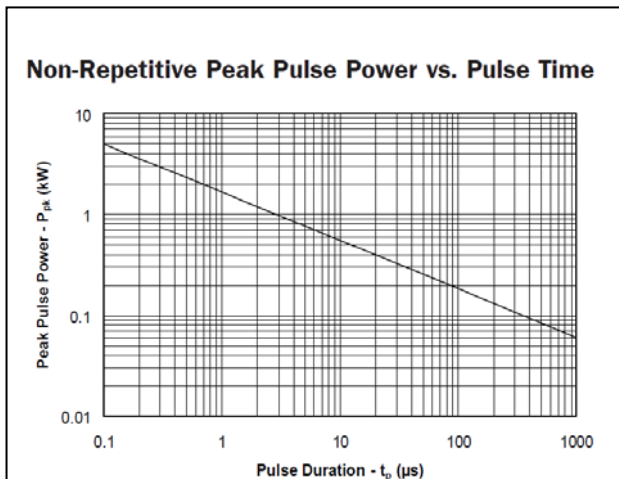
Maximum Rating @ $T_a = 25^\circ C$ unless otherwise specified

Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power ($t_p = 8/20\mu s$)	150	Watts
T_L	Lead Soldering Temperature	260(10sec.)	$^\circ C$
T_J	Operating Temperature	-55 to +125	$^\circ C$
T_{STG}	Storage Temperature	-55 to +150	$^\circ C$

Electrical Characteristics@ Ta=25°C unless otherwise

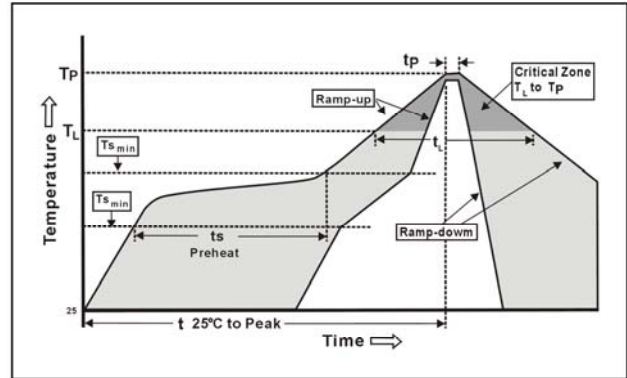
Parameter	Marking	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
		V	μA	V	V	V	A	pF
			MAX	MIN	MAX	MAX		MAX
BV03C	CC	3	20	4	5.15	13.9	10	1.5
BV05C	AC	5	5	6	9.80	18.3	8	1.5
BV08C	BC	8	2	8.5	13.4	18.5	8	1.5
BV12C	DC	12	1	13.3	19.0	28.6	6	1.5
BV15C	EC	15	1	16.7	24.0	31.8	5	1.5
BV24C	HC	24	1	26.7	43.0	56.0	3	1.5

Typical Characteristics@ Ta=25°C unless otherwise specified



Soldering Parameters

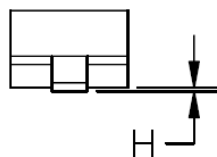
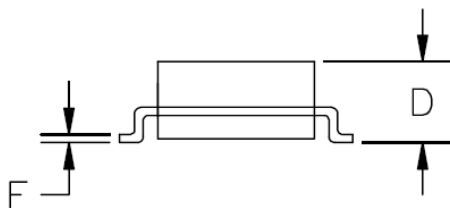
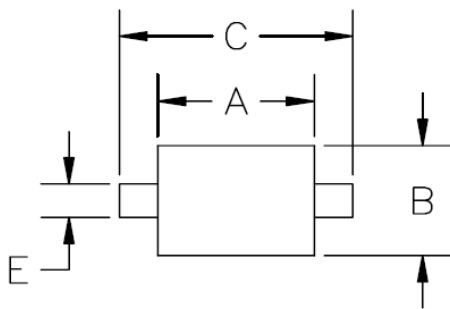
Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{s(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		250 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C



Package Outline

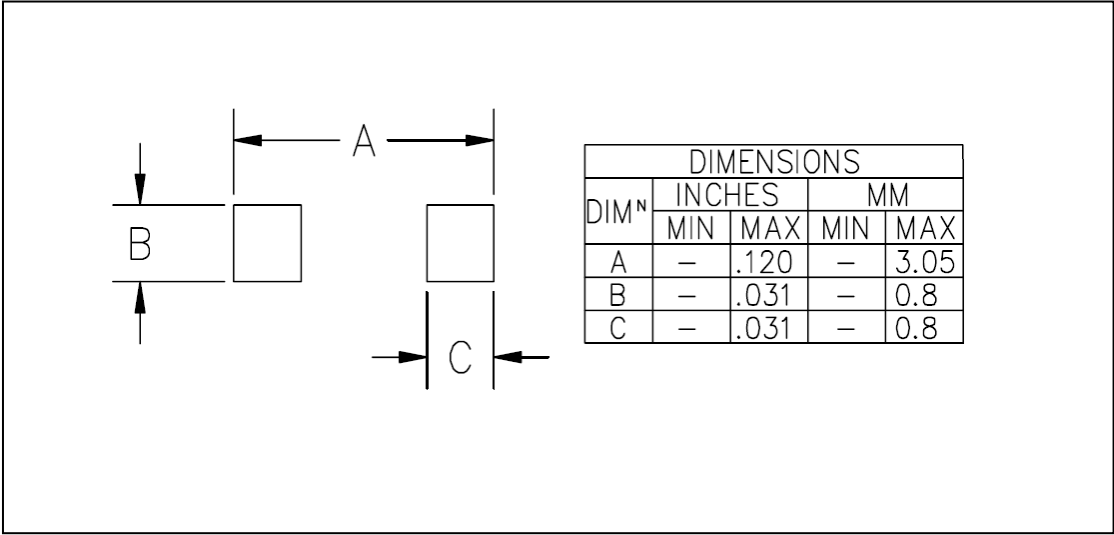
Plastic surface mounted package

SOD323



DIM ^N	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.060	.071	1.5	1.8
B	.045	.054	1.2	1.4
C	.090	.107	2.3	2.7
D	—	.043	—	1.1
E	.012	.016	0.3	0.4
F	.004	.010	.10	.25
H	—	.004	—	.10

Soldering Footprint



Package And Marking Information

Device	Package	Shipping	Reel Size
BVxxC	SOD323	3000/Reel	7 inch