

FEATURES

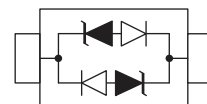
- | 350W Peak Pulse Power per Line ($t_p=8/20\mu s$)
- | Protects one power or I/O Port
- | Low Clamping Voltage
- | Low leakage current

APPLICATIONS

- | Ethernet-10/100/1000 Base T
- | Cellular phones
- | I²C Bus Protection
- | Parallel & Serial Port Protection
- | Personal Digital Assistant (PDA)
- | Microcontroller Input Protection
- | WAN/LAN Equipment



SOD-323



Schematic Symbol

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

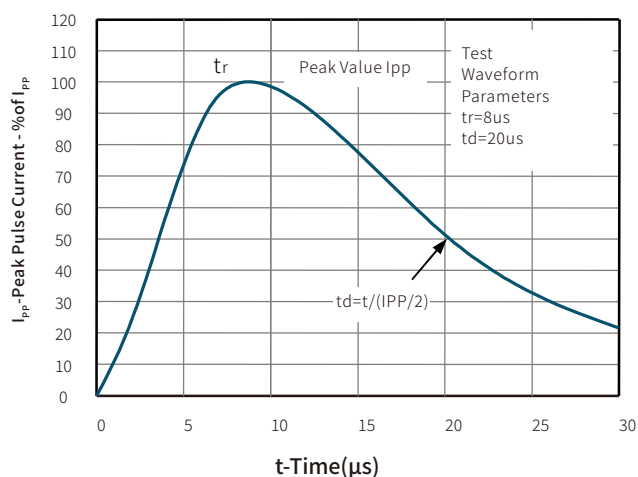
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{pp}	Peak Pulse Power ($t_p=8/20\mu s$ waveform)	350	Watts
T_J	Operating Temperature Range	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$

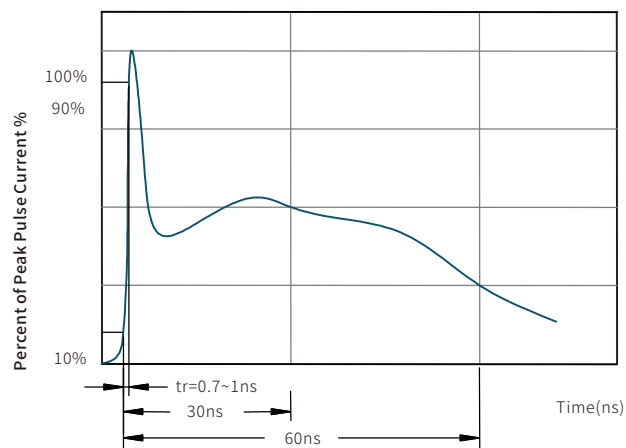
ELECTRICAL CHARACTERISTICS

PART NUMBER	Marking	V_{RWM} (V)	$V_B@1mA$ (V)	$V_C@1A$ (V)	$V_C@I_{pp}$ (V)		$V_C@I_{pp}$ (V)		I_R (μA)	C_T (pF)
		Max	Min	Max	Max	I_{pp} (A)	Max	I_{pp} (A)	Max	Typ.
GBLC03CI	CC	3.0	4.0	7.0	13.9	8.0	20.0	20.0	5.0	0.8
GBLC05CI	AC	5.0	6.0	9.8	18.3	8.0	20.0	18.0	1.0	0.8
GBLC08CI	BC	8.0	8.5	13.4	18.5	8.0	24.0	18.0	1.0	0.8
GBLC12CI	DC	12.0	13.3	19.0	24.0	6.0	28.6	12.0	1.0	0.8
GBLC15CI	EC	15.0	16.7	24.0	29.0	5.0	31.8	10.0	1.0	0.8
GBLC18CI	FC	18.0	20.0	35.0	45.0	5.0	53.0	7.0	1.0	0.8
GBLC20CI	GC	20.0	22.0	38.0	45.0	4.0	55.0	7.0	1.0	0.8
GBLC24CI	HC	24.0	26.7	43.0	45.0	3.0	56.0	6.0	1.0	0.8
GBLC36CI	IC	36.0	40.0	60.0	65.0	2.0	75.0	4.5	1.0	0.8

CHARACTERISTIC CURVES

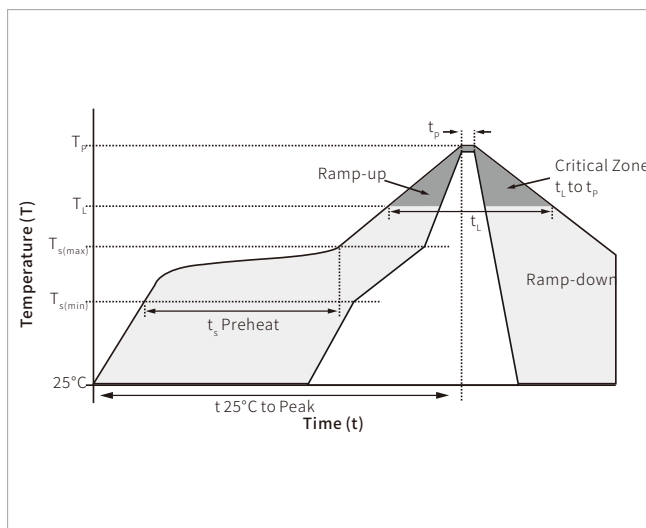
8/20 μ s Pulse Waveform


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

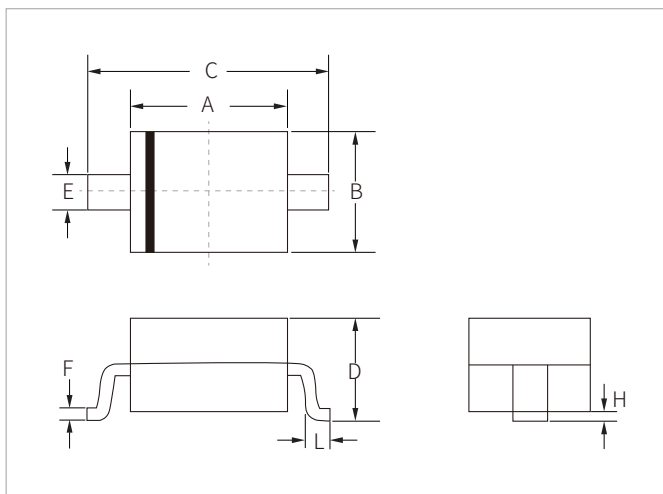


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	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
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°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

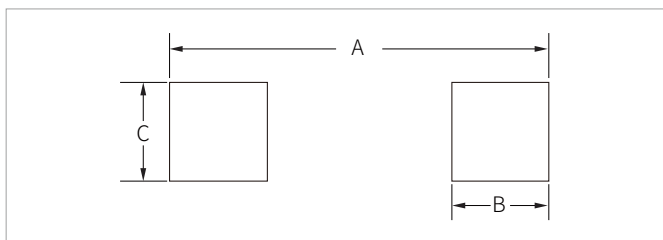


SOD-323 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.35	2.75	0.093	0.108
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	0.40	0.008	0.016

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
GBLCXXCI	SOD-323	3000PCS	7"

To find your local partner within Semiwell 's website : www.semiwell.com

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