

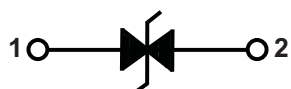
Features

- 12W Peak Pulse Power Per Line(8/20us)
- 5V Working Peak Reverse Voltage
- Maximum Reverse Peak Pulse Current:1.3A
- ESD per IEC 61000-4-2(Contact):10KV
- ESD per IEC 61000-4-2(Air):15KV
- Clamping Voltage @IPP=1A:8.6V
- Junction Capacitance:2.5PF
- Package:DFN1006-2L(0402)
- Polarity: Bidirectional

Mechanical Characteristics

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- Lead Finish: NiPdAu
- Case Material: “ Green ” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Schematic And Configuration



Ordering Information

Part Number	Packaging	Reel Size
TEVB2R5V05B1X	Tape & Reel	7inch

Absolute Maximum Ratings (Ta=25°C, RH=45%-75%, unless otherwise noted)

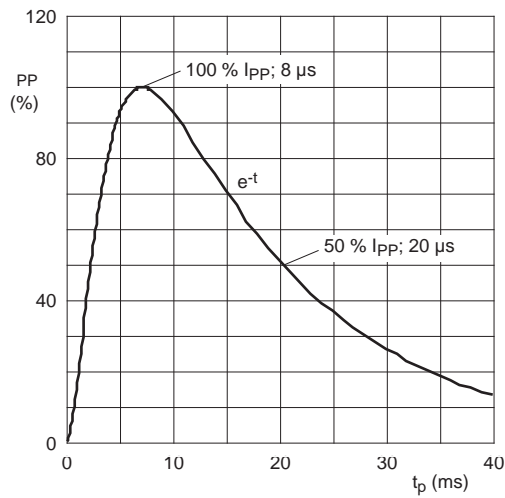
Parameter	Symbol	Value	Unit
Operating Temperature Range	Tj	-40~+85	
Storage Temperature Range	Tstg	-55~+125	

Electrical Characteristics (Ta=25°C)

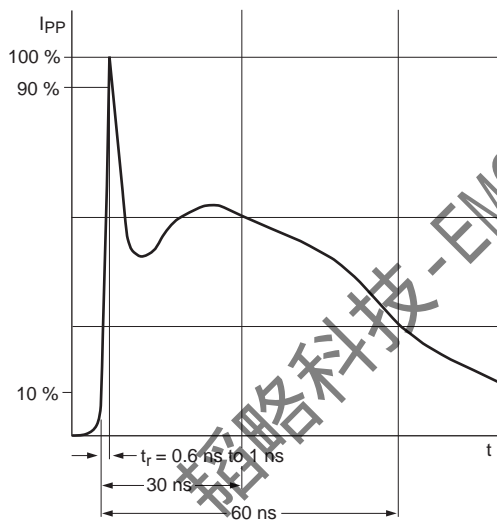
Parameter	Symbol	Min	Type	Max	Unit	Test Condition
Reverse Working Voltage	Vrwm			5	V	
Breakdown Voltage	Vbr	6			V	It=1mA
Reverse Leakage Current	Ir			0.1	uA	Vrwm=5V
Clamping Voltage	Vc		8.6	9	V	Ipp=1A(8 × 20us pulse)
Juntion Capacitance	Cj		2.5	3	pF	Vr=0V,f=1MHz

Typical Performance Characteristics (Ta=25 , unless otherwise noted)

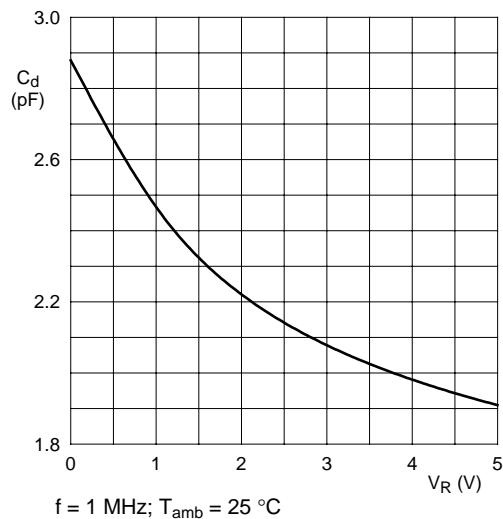
8/20us pulse waveform according to IEC 61000-4-5



ESD pulse waveform according to IEC61000-4-2

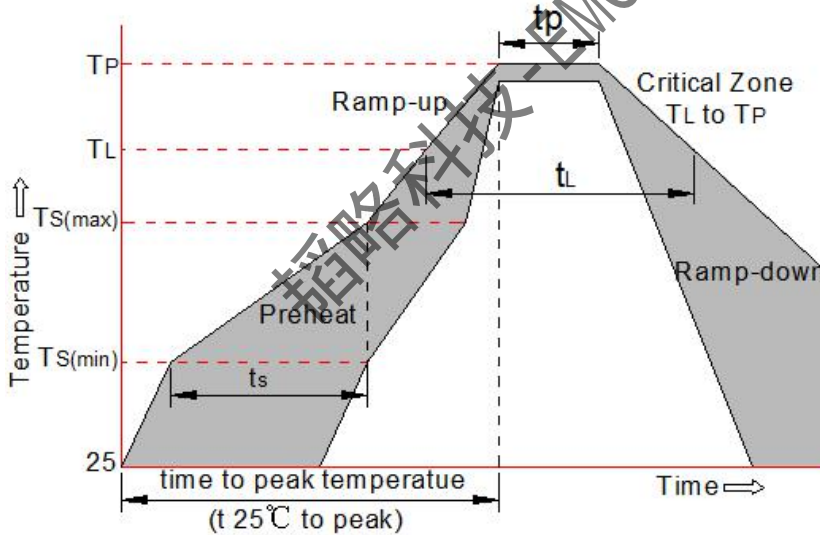


Diode capacitance as a function of reverse voltage

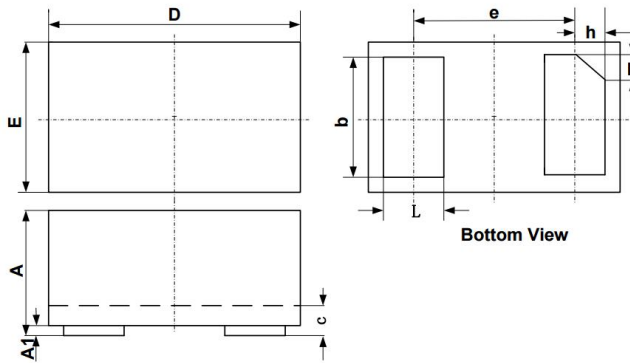


Soldering Parameters

Reflow Condition		Pb-Free Assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L) (Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

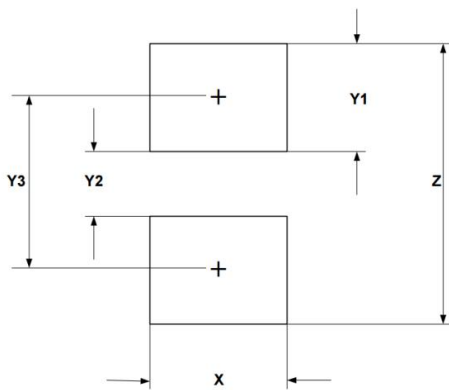


Package Mechanical Data



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.30	0.008	0.010	0.012
h	0.07	0.12	0.17	0.003	0.005	0.007

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.60	0.024
Y1	0.50	0.020
Y2	0.30	0.012
Y3	0.80	0.032
Z	1.30	0.052

Contact Information

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