

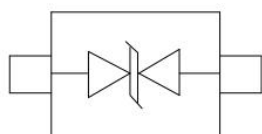
Features

- 300W Peak Pulse Power Per Line(8/20us)
- 5V Working Peak Reverse Voltage
- Maximum Reverse Peak Pulse Current:18A
- ESD per IEC 61000-4-2(Contact):30KV
- ESD per IEC 61000-4-2(Air):30KV
- Clamping Voltage @IPP=1A:8V
- Junction Capacitance:1.5PF
- Package:SOD-323(0805)
- Polarity: Bidirectional

Mechanical Characteristics

- Mechanical Characteristics
- 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
TEVD1R5V05B1X	Tape & Reel	7inch

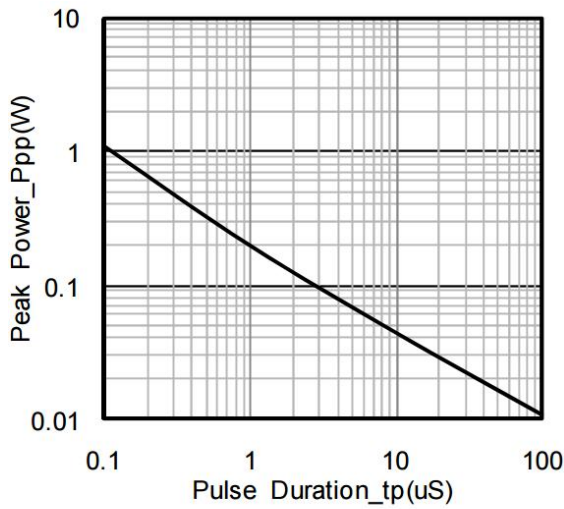
Absolute Maximum Ratings (Ta=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating Temperature Range	Tj	-55~+125	
Storage Temperature Range	Tstg	-55~+150	

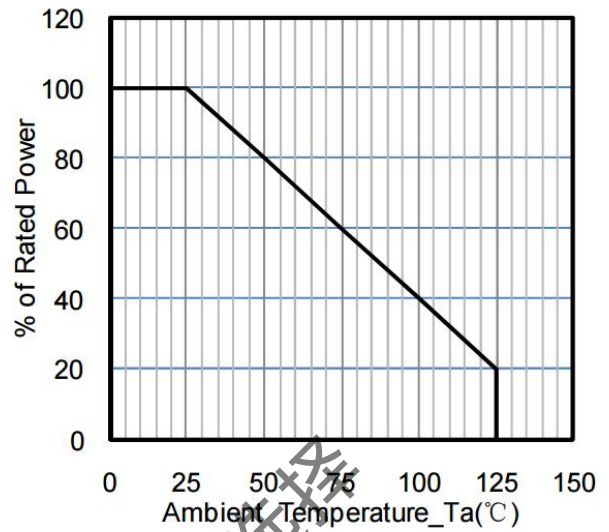
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Type	Max	Unit	Test Condition
Reverse Working Voltage	Vrwm			5	V	
Breakdown Voltage	Vbr	6.7			V	It=1mA
Reverse Leakage Current	Ir			0.1	uA	Vrwm=5V
Clamping Voltage	Vc		8	9.8	V	Ipp=1A(8 × 20us pulse)
Juntion Capacitance	Cj		1	1.5	pF	Vr=0V,f=1MHz

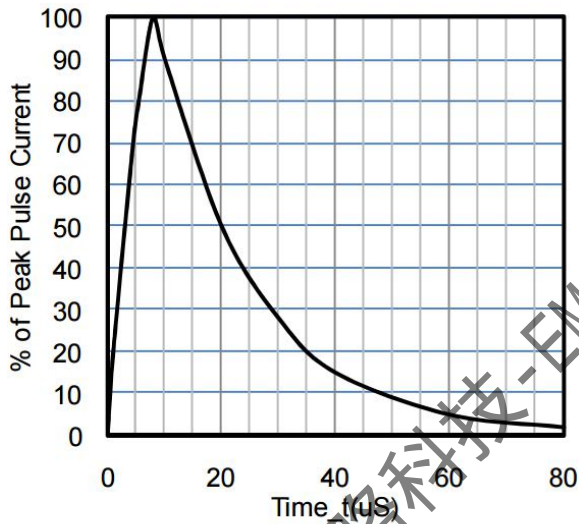
Typical Performance Characteristics (Ta=25 , unless otherwise noted)



Peak Pulse Power vs. Pulse Time



Power Derating Curve

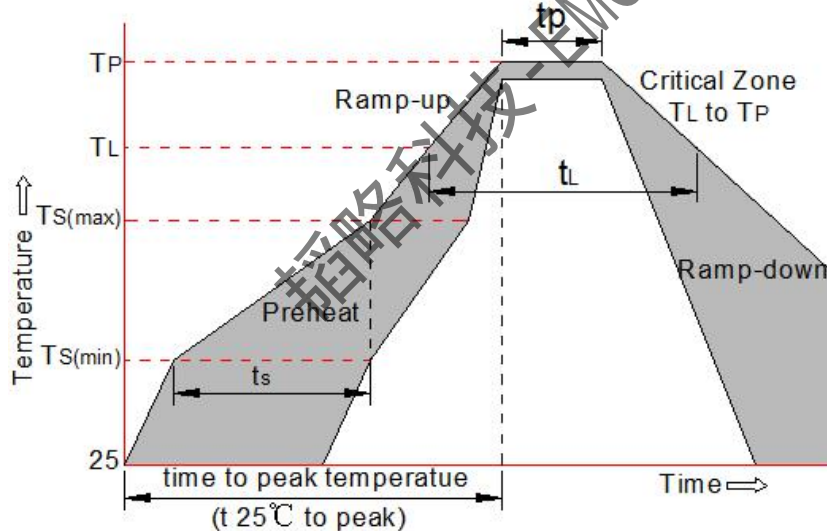


8 X 20uS Pulse Waveform

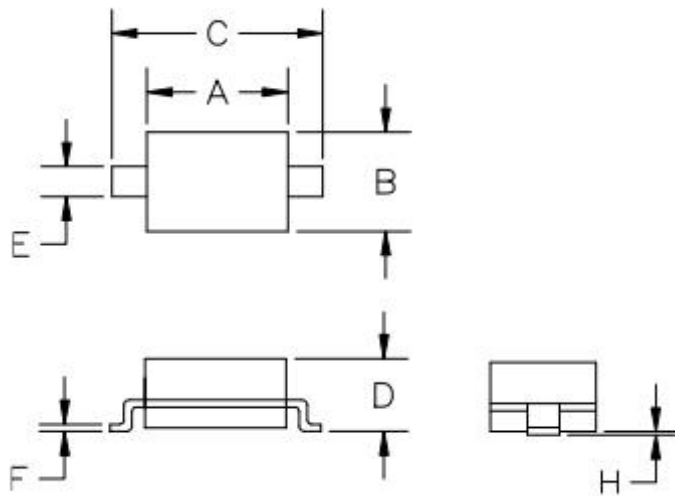
超能科技-EMC方案的最佳选择

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

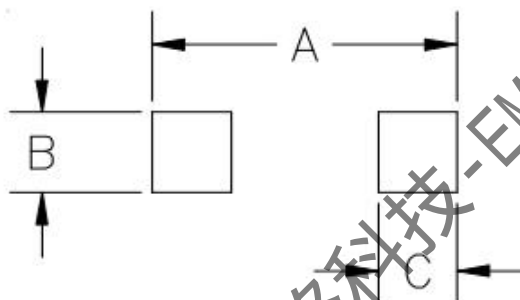


Package Mechanical Data



SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.50	1.80	0.060	0.071
B	1.20	1.40	0.045	0.054
C	2.30	2.70	0.090	0.107
D	-	1.10	-	0.043
E	0.30	0.40	0.012	0.016
F	0.10	0.25	0.004	0.010
H	-	0.10	-	0.004

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

Contact Information

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