

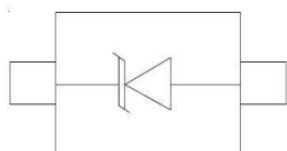
Features

- 133W Peak Pulse Power Per Line(8/20us)
- 5V Working Peak Reverse Voltage
- Maximum Reverse Peak Pulse Current:15A
- ESD per IEC 61000-4-2(Contact):8KV
- ESD per IEC 61000-4-2(Air):15KV
- Clamping Voltage @IPP=1A:7.8V
- Junction Capacitance:300PF
- Package:SOD-323(0805)
- Polarity: Unidirectional

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
TEVD300R0V05D1X	Tape & Reel	7inch

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

Parameter	Symbol	Value	Unit
Operating Temperature Range	Tj	-50~+125	°C
Storage Temperature Range	Tstg	-50~+150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Type	Max	Unit	Test Condition
Reverse Working Voltage	Vrwm			5	V	
Breakdown Voltage	Vbr	6.64			V	It=1mA
Reverse Leakage Current	Ir			0.1	uA	Vrwm=5V
Clamping Voltage	Vc		7.8	9	V	Ipp=1A(8×20us pulse)
Juntion Capacitance	Cj		250	300	pF	Vr=0V,f=1MHz

Typical Performance Characteristics ($T_a=25^\circ\text{C}$, unless otherwise noted)

Figure 1- Power Derating Curve

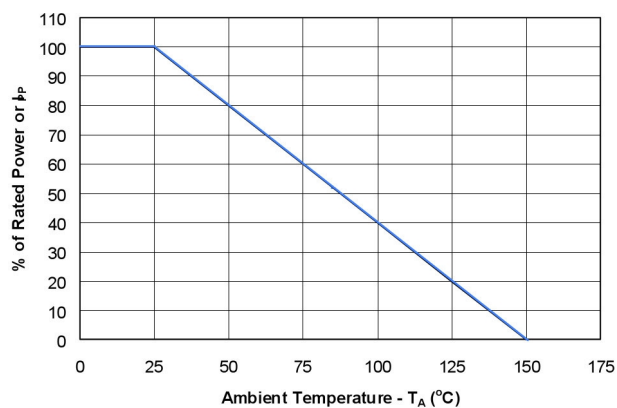


Figure 2- Pulse Waveform

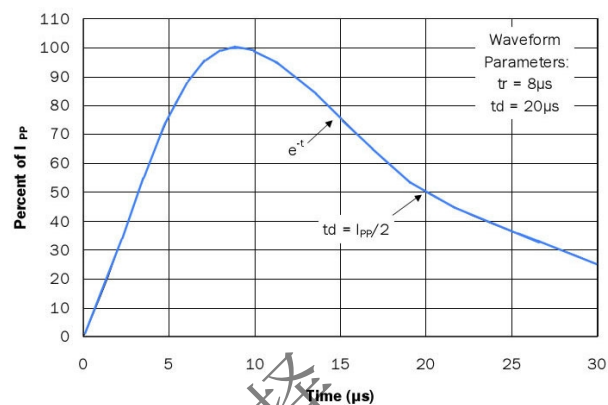


Figure 3- Peak Power Derating Curve

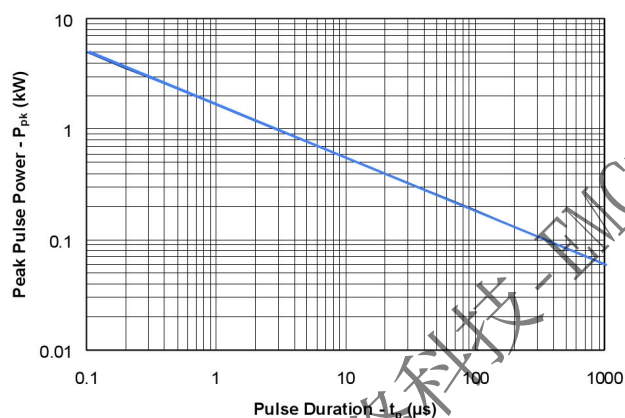
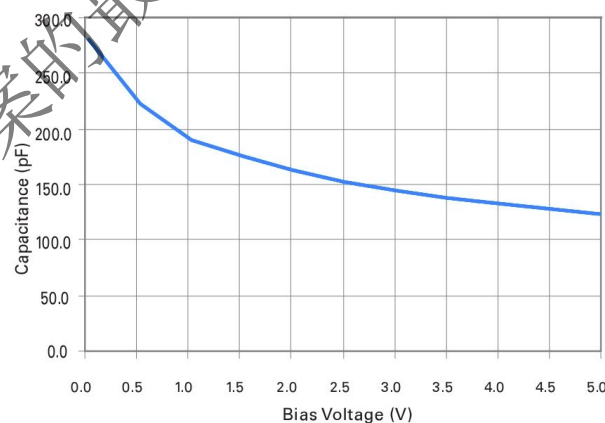
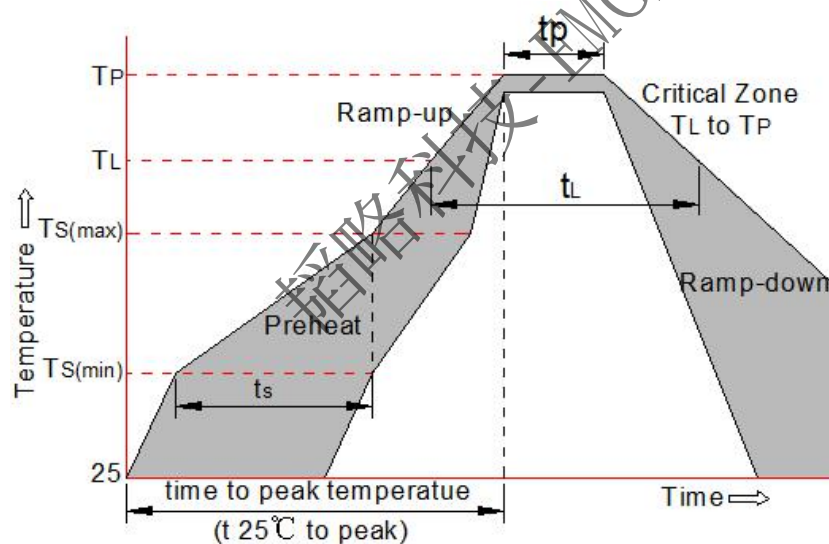


Figure 4- Capacitance vs. Reverse Voltage

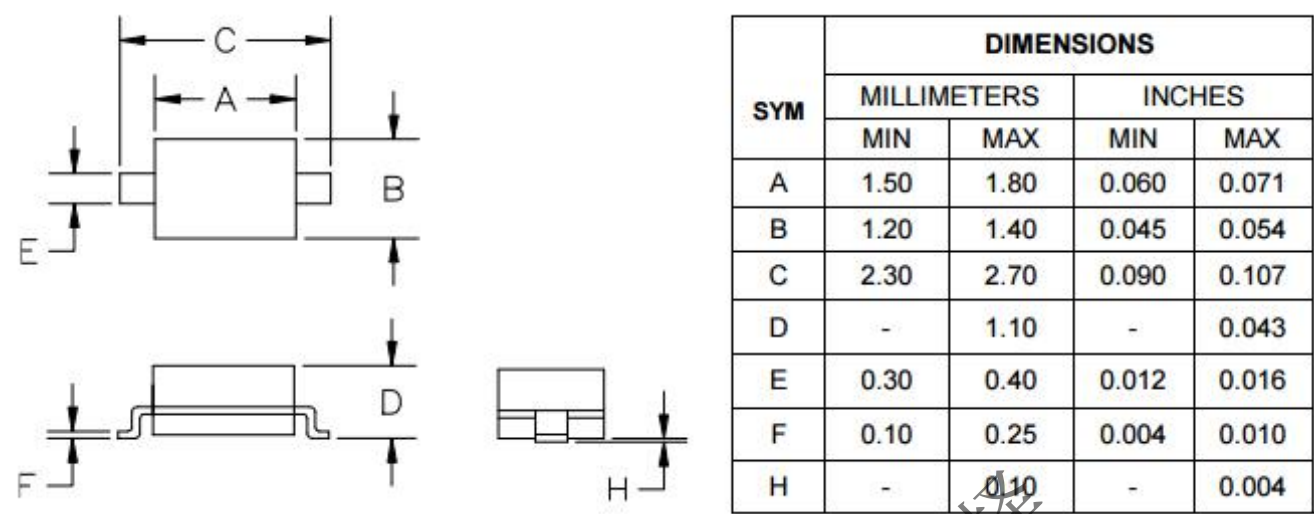


Soldering Parameters

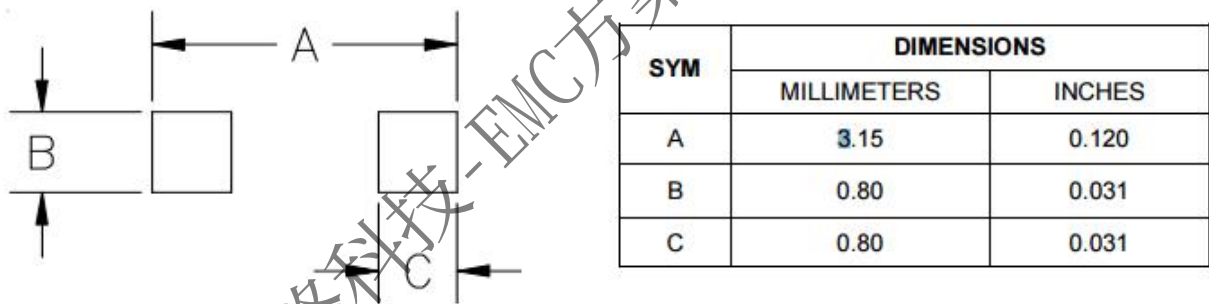
Reflow Condition		Pb-Free Assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (t_s)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L) (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



Suggested Land Pattern



Contact Information

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