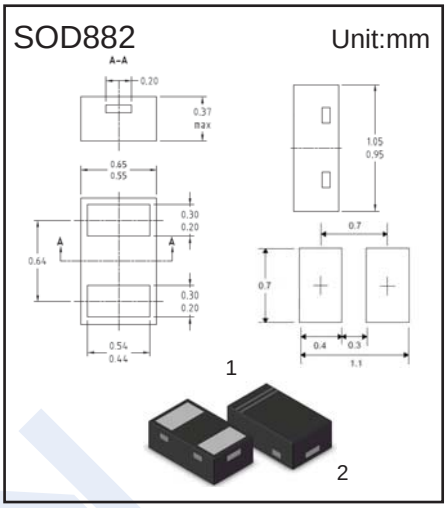
TVS Diodes

ESD8D5.0C



■ Features

- Peak Reverse Working Voltage: 5V
- Peak power up to 100W @ 8 x 20 us Pulse
- Low leakage current
- High ESD protection Level: >+/-15KV per HBM
- IEC61000-4-2 Level 4 ESD Protection
- IEC61000-4-4 Level 4 EFT Protection

Pin Configuration

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
ESD Per IEC61000-4-2 (Air)	V_{PP}	± 15	KV
ESD Per IEC61000-4-2 (Contact)		± 8	
Maximum Peak Pulse Current (tp=8/20us)	I_{PP}	8.7	A
Peak pulse power (tp=8/20 us)	P_{PK}	100	W
Junction Temperature	T_J	150	℃
Maximum Lead Temperature for Soldering During 10s	T_L	260	
Operating temperature range	T_{OP}	-55 to 150	
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Device	Marking	Vrwm (V)	Ir (uA) @Vrwm	Vbr (V) @ It (Note1)	It (mA)	Ipp (A)	Vc (V) @ Max Ipp	Ppk (W) (8 x 20us) (Note2)	C (pF)
		Max.	Max.	Min.	Typ.	Max.	Max.	Typ.	Typ.
ESD8D5.0C	–	5.0	0.5	7.5	1	8.7	12.5	100	30

Note 1: Vbr is measured with a pulse current It.

Note 2: Surge current waveform per Figure 1.

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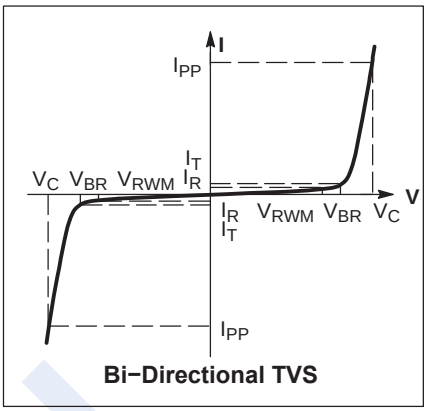
ESD8D5.0C

■ Typical Characterisitics

Symbol	Parameter
Vrwm	Peak Reverse Working Voltage
Ir	Reverse Leakage Current @ Vrwm
Vbr	Breakdown Voltage @ It
It	Test Current
Ipp	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @ Ipp
Ppk	Peak Power Dissipation
C	Junction Capacitance
If	Forward Current
Vf	Forward Voltage @ If



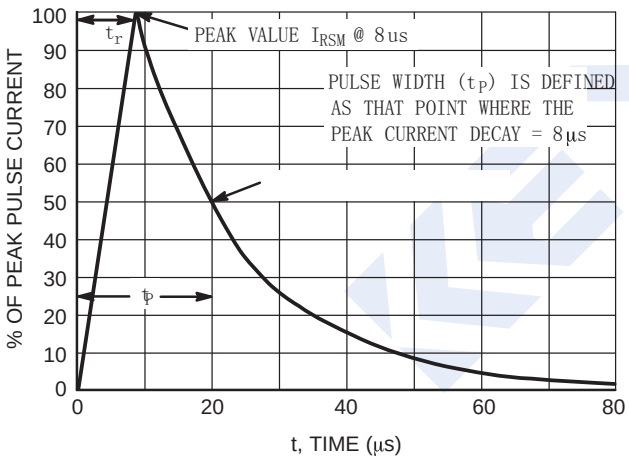


Figure1. 8x20us pulse waveform

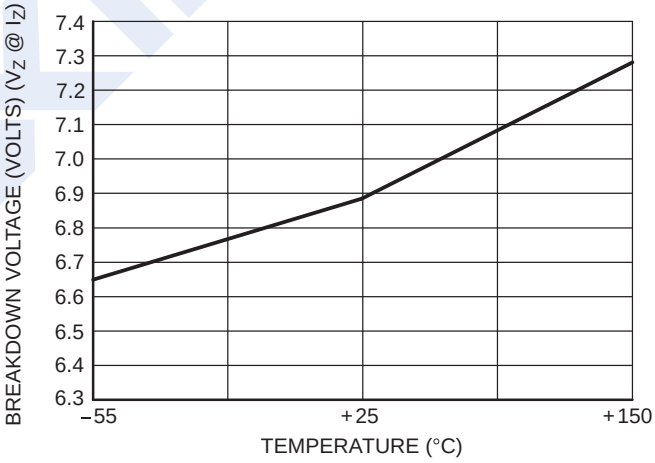


Figure2. Typical breakdown voltage vs temperature

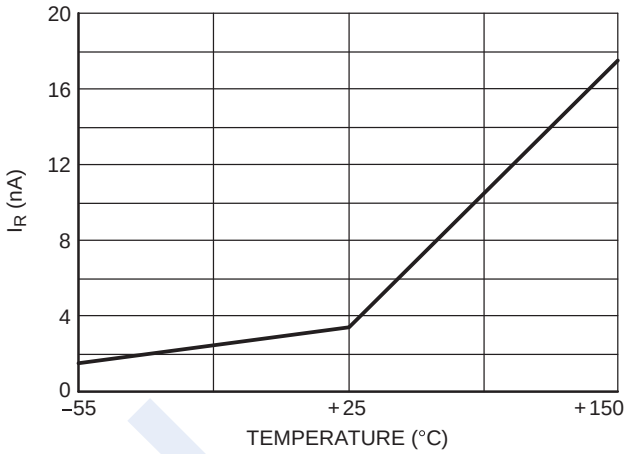


Figure3. Typical leakage current vs temperature