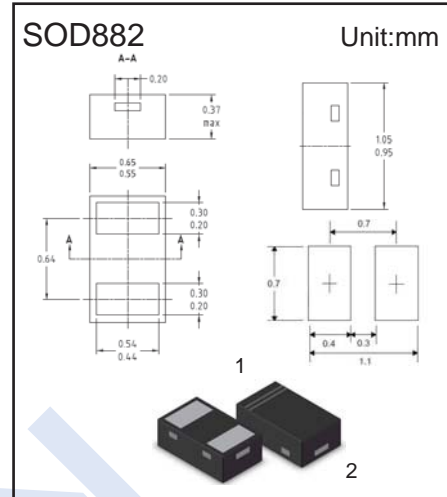


TVS Diodes

ESD8D5C

■ 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



■ Absolute Maximum Ratings Ta = 25°C

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	°C
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°C

Device	Marking	V _{rw}	I _r (uA)	V _{br} (V)	I _t	I _{pp}	V _c (V)	P _{pk} (W)	C
		(V)	@V _{rw}	@ I _t (Note1)	(mA)	(A)	@ Max I _{pp}	(8 x 20us) (Note2)	(pF)
		Max.	Max.	Min.	Typ.	Max.	Max.	Typ.	Typ.
ESD8D5C	-	5.0	0.5	7.5	1	8.7	12.5	100	30

Note 1: V_{br} is measured with a pulse current I_t.

Note 2: Surge current waveform per Figure 1.

TVS Diodes ESD8D5C

■ Typical Characteristics

Symbol	Parameter
V _{rwm}	Peak Reverse Working Voltage
I _r	Reverse Leakage Current @ V _{rwm}
V _{br}	Breakdown Voltage @ I _t
I _t	Test Current
I _{pp}	Maximum Reverse Peak Pulse Current
V _c	Clamping Voltage @ I _{pp}
P _{pk}	Peak Power Dissipation
C	Junction Capacitance
I _f	Forward Current
V _f	Forward Voltage @ I _f

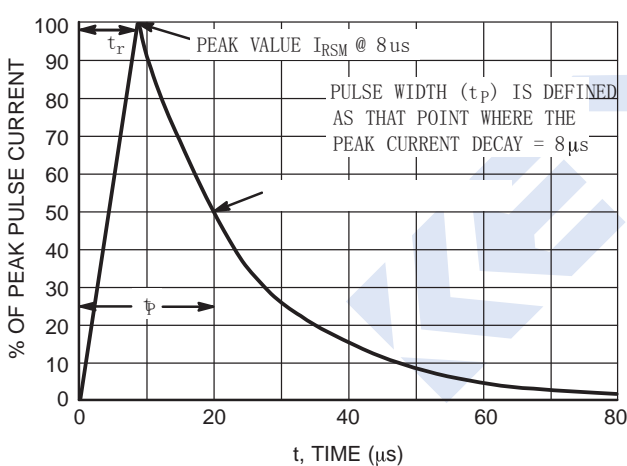
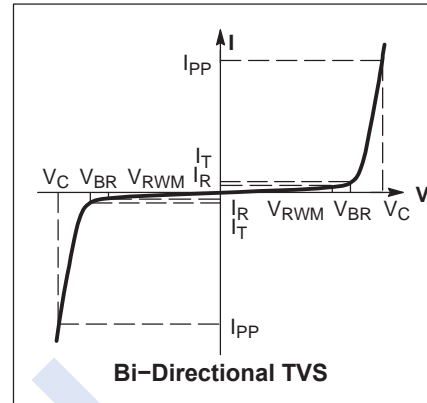


Figure1. 8x20us pulse waveform

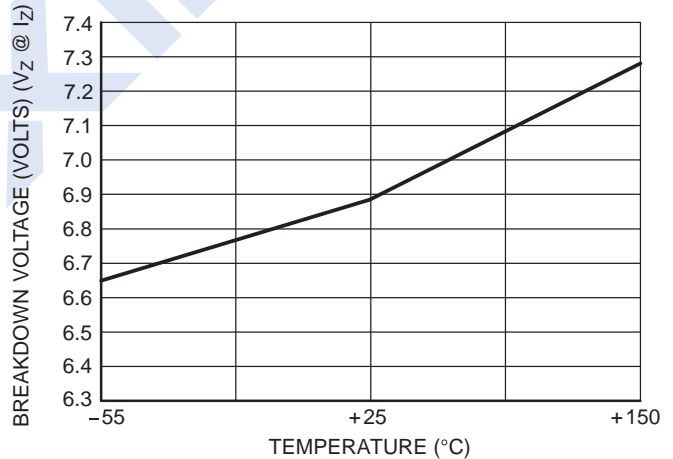


Figure2. Typical breakdown voltage vs temperature

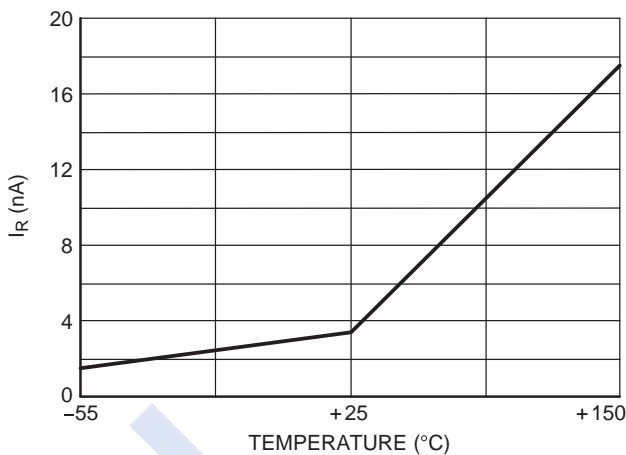


Figure3. Typical leakage current vs temperature