

DESCRIPTION

The TEPxxD series are ultra low capacitance transient voltage suppressor arrays. The TEPxxD series provide circuit protection for high-speed data transmission interfaces in wired and wireless computing and networking applications.

The TEPxxD Series meet IEC 61000-4-2 (ESD), IEC 61000-4-4 (EFT) and IEC61000-4-5(Surge). The TEPxxD Series offer an ultra low capacitance protection solution for circuits operating at high frequencies and faster edge rates, where insertion loss and signal integrity are serious concerns.

ORDERING INFORMATION

- ✧ Device:TEPxxD
- ✧ Package: SOT-23
- ✧ Material: Halogen free
- ✧ Packing: Tape & Reel
- ✧ Quantity per reel: 3,000pcs

FEATURES

- ✧ Transient protection for high-speed data lines
 - IEC 61000-4-2 (ESD) 8kV (Contact)
15kV (Air)
 - IEC 61000-4-4 (EFT) 40A (5/50 ns)
- ✧ Protects tow I/O lines
- ✧ Working voltages: 5V, 12V, 15V, 24V
- ✧ Low clamping voltage
- ✧ Low leakage current
- ✧ Response time is < 1 ns

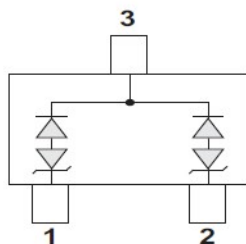
MACHANICAL DATA

- ✧ SOT-23 package
- ✧ Flammability Rating: UL 94V-0
- ✧ Packaging: Tape and Reel
- ✧ High temperature soldering guaranteed:
260°C/10s
- ✧ Reel size: 7 inch
- ✧ MSL1

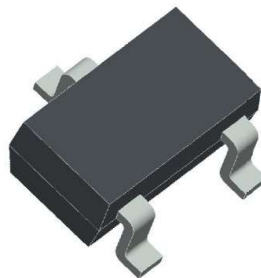
APPLICATIONS

- ✧ High-Speed Data Transmission Interfaces
- ✧ Cellular Phones
- ✧ Portable Electronics
- ✧ Wireless Bus Protection

PIN CONFIGURATION



PACKAGE OUTLINE



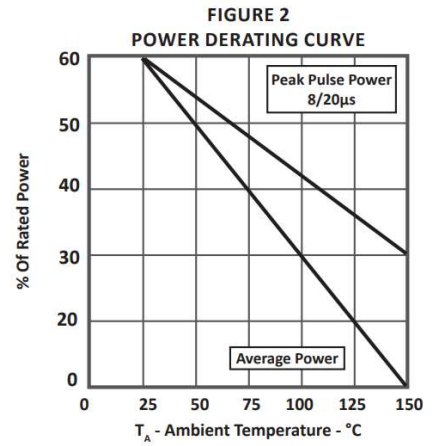
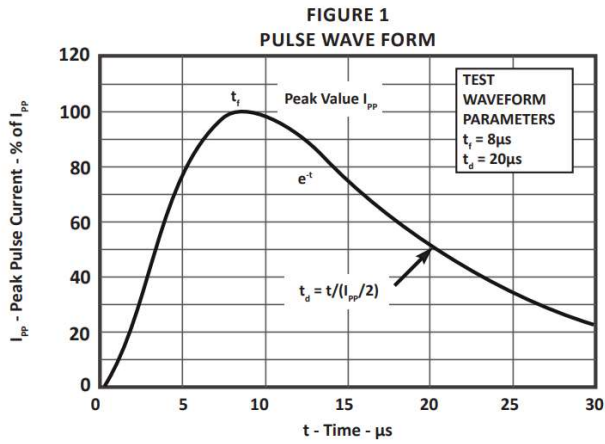
ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact)	8	kV
	ESD per IEC 61000-4-2 (Air)	15	
P_{PP}	Peak Pulse Power (8/20 μ s)	350	W
T_{OPT}	Operating Temperature	-55/+150	°C
T_{STG}	Storage Temperature	-55/+150	°C
T_L	Lead Soldering Temperature	260	°C

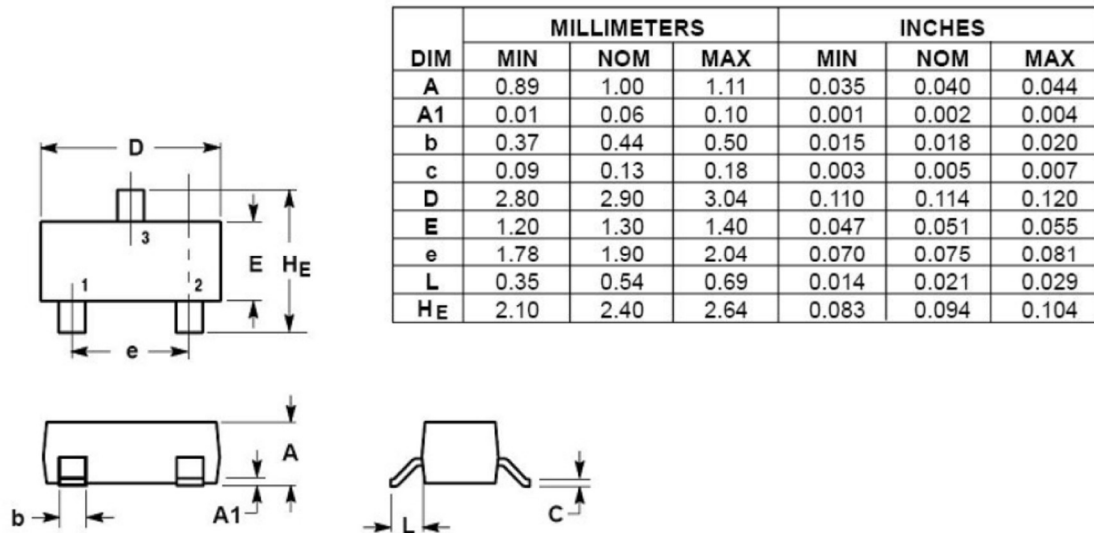
PART NUMBER	DEVICE MARKING	V_{RWM}	$V_B@1mA$	$V_C@I_{pp}$		$V_C@I_{pp}$		I_R	C_T
		(V)	(V)	(V)		(V)		(μ A)	(pF)
		Max	Min	Max	I_{pp} (A)	Max	I_{pp} (A)	Max	Max.
TEP05D	T2S	5.0	6.0	9.8	1	11	5	1	0.8
TEP12D	DJ2	12.0	13.3	19	1	24	5	1	0.8
TEP15D	DJ5	15.0	16.7	24	1	30	5	1	0.8
TEP24D	DJ4	24.0	26.7	43	1	55	5	1	0.8

Note: above parameters are Pin 1 or Pin 2 to Pin3.

RATING AND CHARACTERISTICS CURVES (TEPxxD SERIES)



SOT-23 PACKAGE OUTLINE DIMENSIONS



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