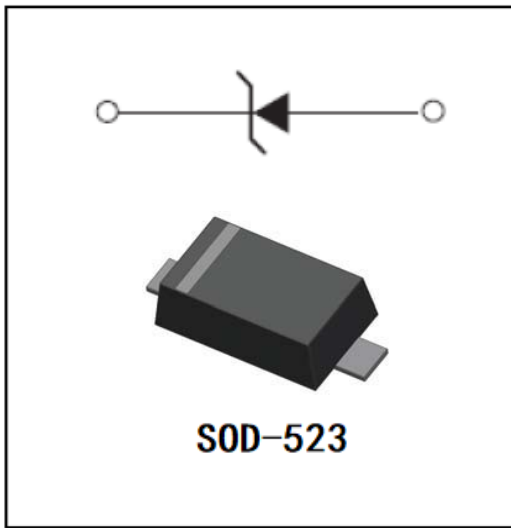


ESD Protection Diode



Features

- For sensitive ESD protection
- Low leakage
- Uni-directional ESD protection of one line
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Mechanical Data

- **Package:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** ZH

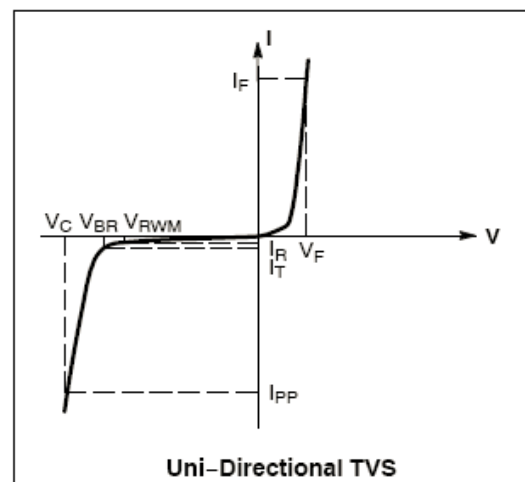
Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Operating Junction & Storage Temperature	T_J & T_{STG}	-45 to +125	°C
IEC61000-4-2(ESD)Air	VESD	±15	KV
IEC61000-4-2(ESD)Contact		±8	KV
Peak Pulse Current	$I_{PP}^{(2)}$	8.8	A

(1). Non-repetitive current pulse 8/20 μ s exponential decay waveform according to IEC61000-4-5.

Electrical Parameter

PARAMETER	SYMBOL
Clamping Voltage@ I_{PP}	V_C
Breakdown Voltage@ I_T	V_{BR}
Peak Pulse Current	I_{PP}
Test Current	I_T
Reverse Leakage Current@ V_{RWM}	I_R
Reverse Standoff Voltage	V_{RWM}
Forward Voltage@ I_F	V_F
Forward Current	I_F
Peak Power Dissipation	P_{PK}
Max. Capacitance @ $V_R=0$ and $f=1$ MHz	C





ESD7V0D5

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Standoff Voltage	V _{RWM} ⁽¹⁾	V				7.0
Reverse Leakage Current	I _R	uA	VRWM=7.0V			0.03
Breakdown Voltage	V _(BR)	V	I _T =1mA	7.5		
Clamping Voltage	V _C ⁽²⁾	V	I _{PP} =8.8A , tp=8/20us			22.7
Forward voltage	V _F	V	I _F =10mA			0.9
Peak Power Dissipation	P _{pk}	W	tp=8/20us			200
Junction Capacitance	C _J	pF	V _R =0V,f=1MHz		65	

(1).Other voltages available upon request.

(2).Non-repetitive current pulse 8/20 μ s exponential decay waveform according to IEC61000-4-5

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD7V0D5	F2	Approximate 0.002	8000	80000	320000	7" reel

■ Characteristics (Typical)

Fig. 1 - 8 X 20μs Pulse Waveform

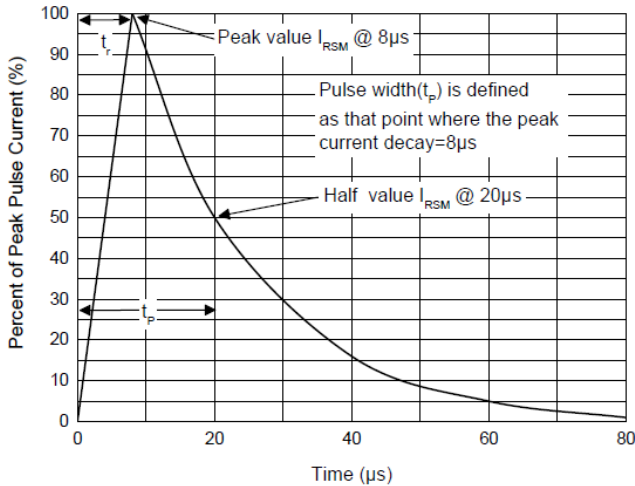
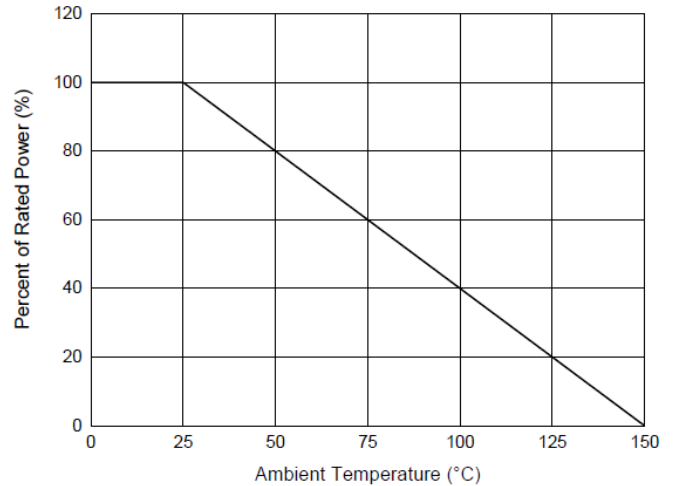
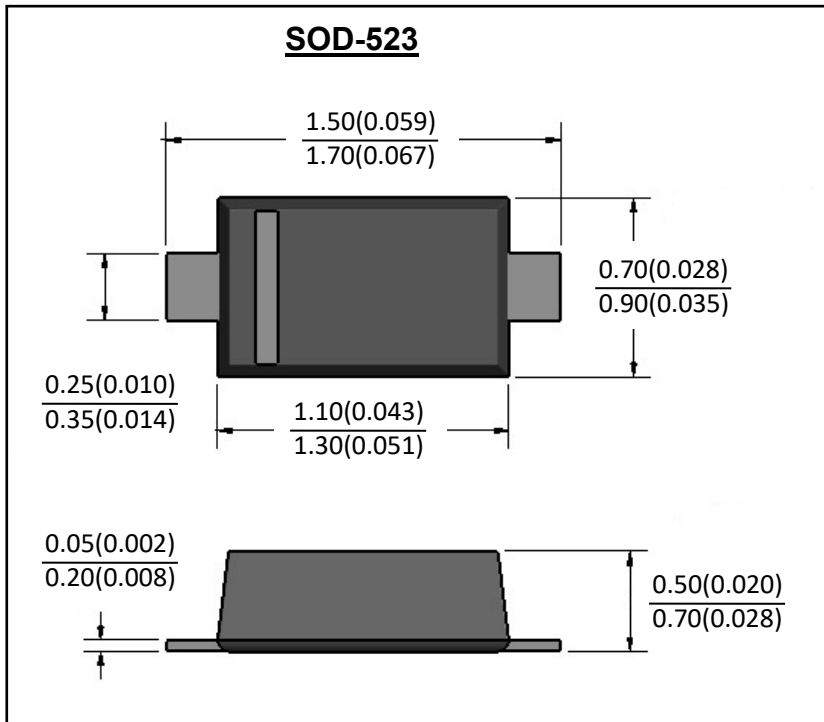


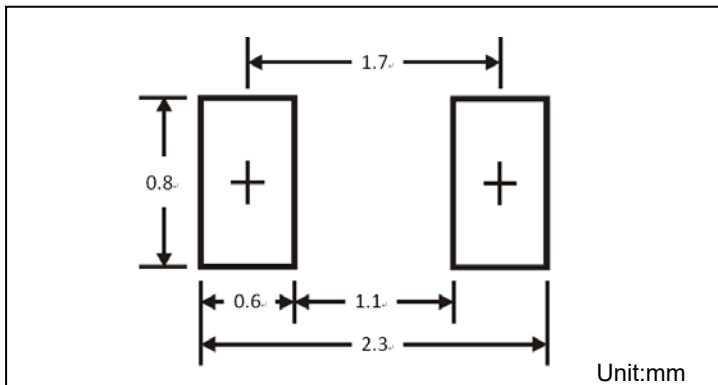
Fig. 2 - Pulse Derating Curve



■ Outline Dimensions



■ Soldering Footprint





ESD7V0D5

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