



Uni-directional ESD Diode

Peak Pulse Power - 100 Watts

Features

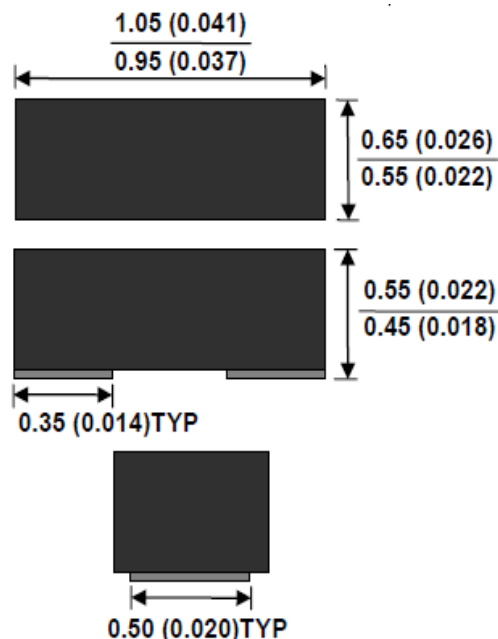
- Protects single I/O lines
- Working Voltage: 36V
- Low leakage current
- Low operating and clamping voltages
- Pb free version, RoHS compliant, and Halogen free

Mechanical Data

- Case: DFN1006(0402) standard package
- Terminals: Sn / Au plated, solderable per MIL-STD-750, method 2026
- Mounting position: Any.
- MSL: Level 1

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

DFN1006(0402)



Package Outline Dimensions in Millimeters (Inches)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Min	Typ	Max	Unit
	Marking	E6			
Peak Pulse Power, $t_p=8/20 \mu s$ (According to IEC61000-4-5)	Ppp		100		W
Maximum Peak Pulse Current, $t_p=8/20 \mu s$ (According to IEC61000-4-5)	Ipp		1.5		A
ESD per IEC 61000-4-2 (Air)	VESD		± 25		KV
ESD per IEC 61000-4-2 (Contact)			± 25		KV
Operating Junction Temperature	Tj	-40		125	
Storage Temperature	Tstg	-55		150	°C
Reverse Stand-Off Voltage	VRWM			36	V
Reverse Breakdown Voltage, $I_t = 1mA$	VBR	40			V
Reverse Leakage Current, VRWM = 36V	IR			100	nA
Clamping Voltage, $I_{pp} = 1A, t_p = 8/20 \mu s$	Vc			58	V
Junction Capacitance, Between I/O Pin and GND VR=0V, f=1MHz	Cj		20		pF



Fig.1 - 8/20us Peak Pulse Current Wave Form Acc. IEC 61000-4-5

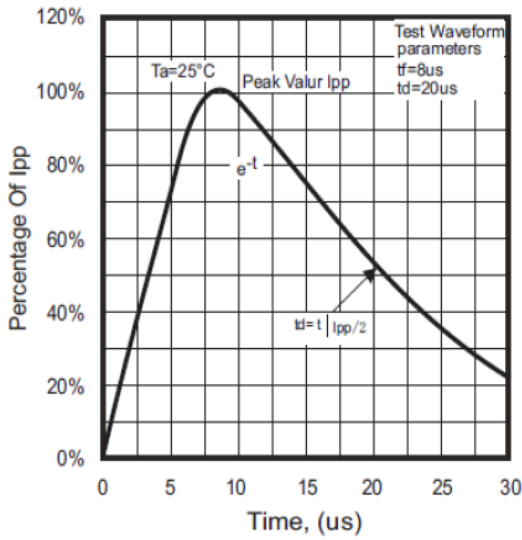


Fig.2 - Power Rating Derating Curve

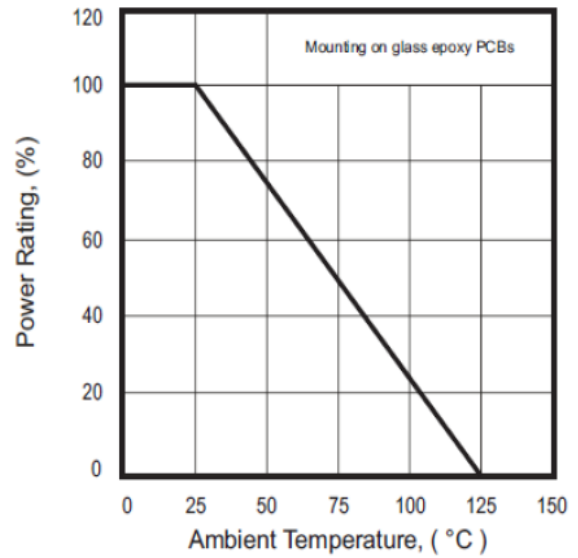


Fig.3 - Typical Clamping Voltage Vs. Peak Pulse Current

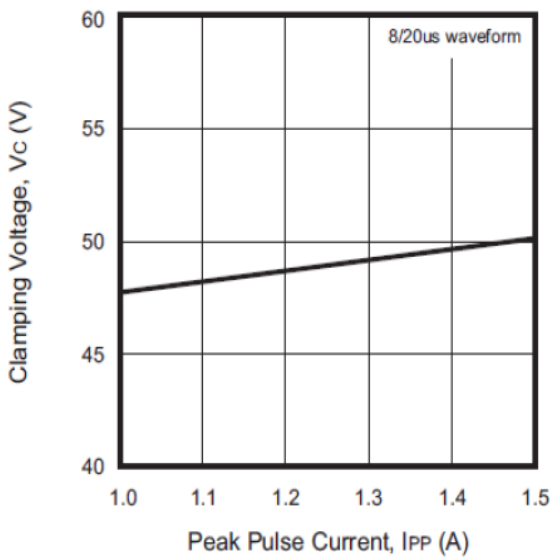


Fig.4 - Forward Characteristic

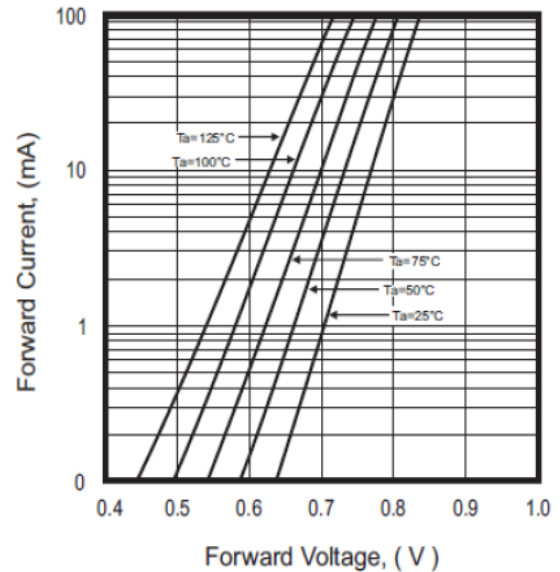
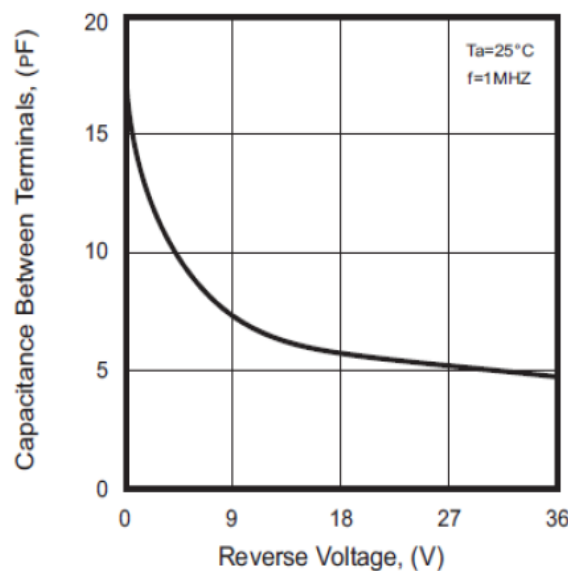


Fig.5 - Typical Capacitance Between Terminals Characteristics



The curve above is for reference only.



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