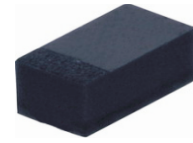


CPDERT5V0U(RoHS Device)

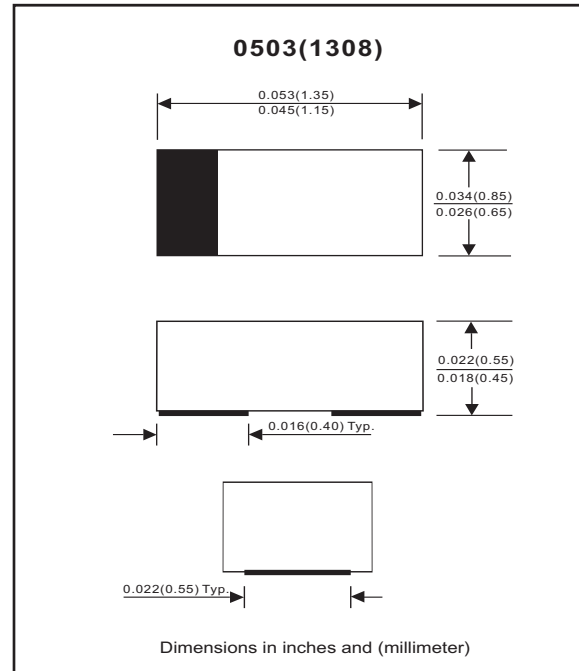


Features

- Uni-directional ESD protection
- IEC 61000-4-2 15kV(contact), 20kV(air).
- Working voltage:5V
- Ultra small SMD package:0503.
- High component density.

Mechanical data

- Case:0503 (1308) Standard package , molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking Code: Cathode band & E05
- Mounting position: Any.
- Weight: 0.0011 gram (approx.).



Maximum Rating AND Electrical Characteristics (at TA=25 °C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 10mA	V _F		0.8		V
Diode breakdown voltage	I _R = 1mA	V _{BD}	6			V
Leakage current	V _R = 5V	I _L		0.3	2.0	uA
Junction capacitance	V _R = 0V, f = 1MHz	C _T		90	120	pF
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			20 15	kV
Clamping voltage	I _{PP} = 5A, T _P =8/20us I _{PP} = 16A, T _P =8/20us	V _C			9.8 12.5	V
Peak pulse power		P _{PP}			200	W
Operation temperature		T _J			125	°C
Storage temperature		T _{STG}	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDERT5V0U)

Fig. 1 - 8/20us Peak pulse current wave form acc. IEC 61000-4-5

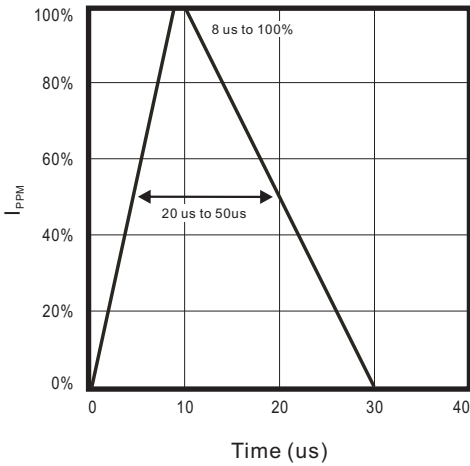


Fig. 2 - Power rating derating curve

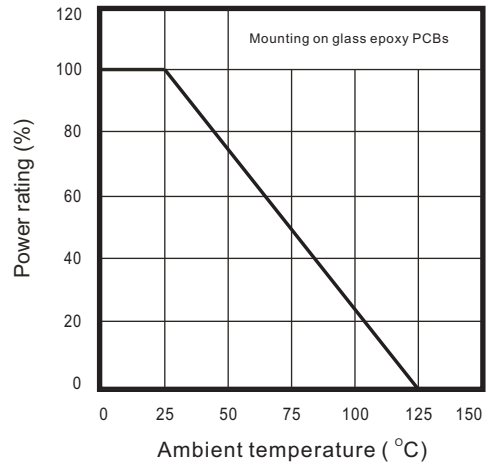


Fig. 3 - Clamping voltage vs. peak pulse current

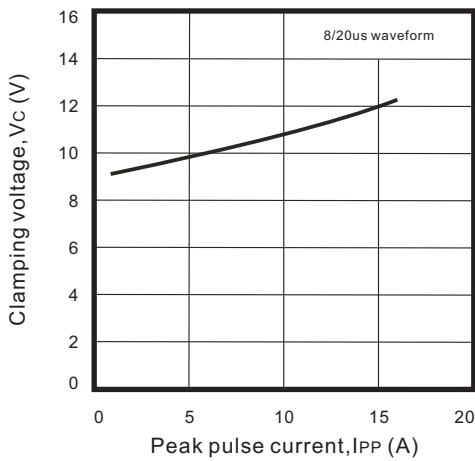


Fig. 4 - Forward voltage vs. forward current

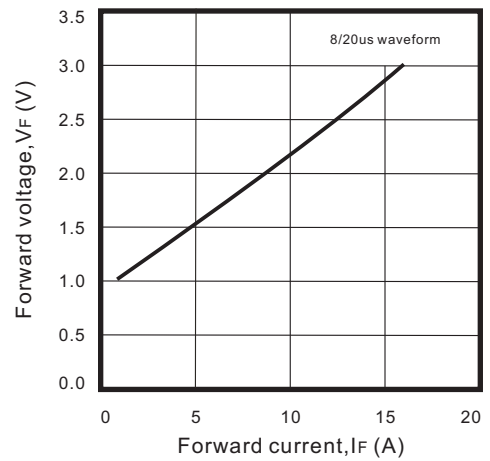


Fig. 5 - Capacitance between terminals characteristics

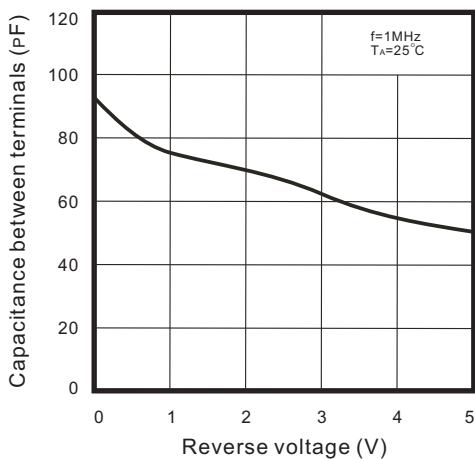


Fig. 6 - ESD Clamping (8kv Contant per IEC 61000-4-2)

