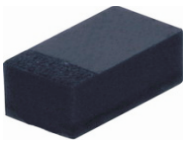
SMD ESD Protection Diode

COMCHIP
SMD Diodes Specialist

CPDER Series(RoHs Device)



Features

(16kV) IEC 61000-4-2 rating.

Surface mount package.

High component density.

Mechanical data

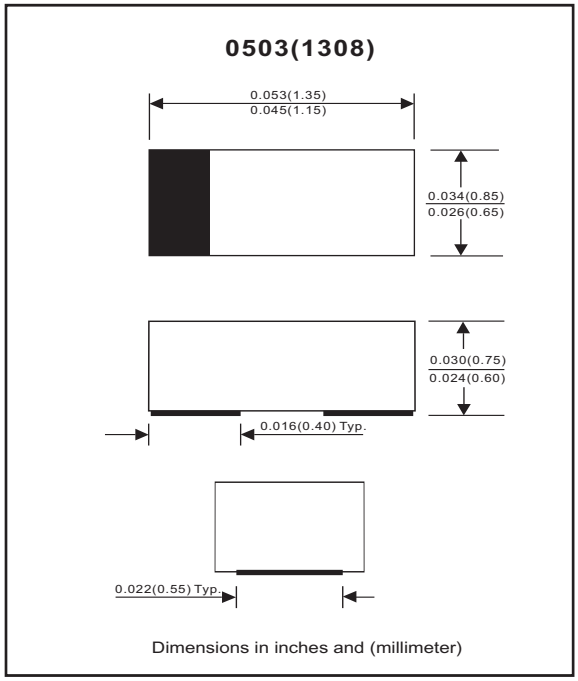
Case: 0503(1308) standard package, molded plastic.

Terminals: Gold plated, solderable per MIL-STD-750,method 2026.

Marking Code:
CPDER5V0: E05
CPDER12V: E12
CPDER24V: E24
CPDER36V: E36

Mounting position: Any

Weight: 0.002 gram(approx.).



Electrical Characteristics (at T_A=25°C unless otherwise noted)

Parameter		Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	I_F = 1mA	V_{BD}	5.1 14 25 38	7.0 17 28 40		V
Leakage current	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	V_R = 5V V_R = 12V V_R = 24V V_R = 36V	I_L		±0.1	±2.0	uA
Capacitance	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	@ 1MHz	C_T		15 12 10 5	20 --- --- ---	pF
Channel clamp voltage	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	8kV event	V_{ESD}			± 7.0 ± 17 ± 25 ± 40	V
Peak ESD voltage capability	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	IEC 61000-4-2	V_{PV}			16	kV
Peak pulse current	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**	8 / 20 us	I_{PP} *			5.1 1 1 1	A
Package Power	**CPDER5V0** **CPDER12V** **CPDER24V** **CPDER36V**		P			100	mW

* one diode conducting.

RATING AND CHARACTERISTIC CURVES (CPDER Series)

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

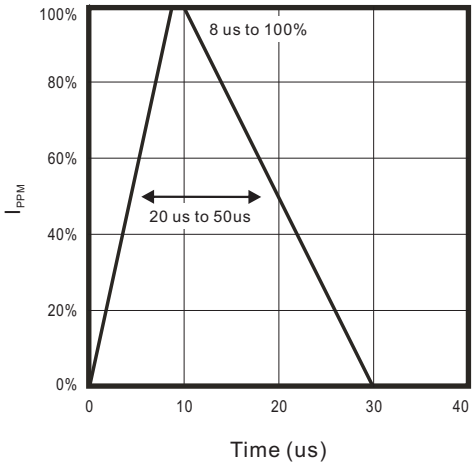


Fig. 2 - Reverse characteristics

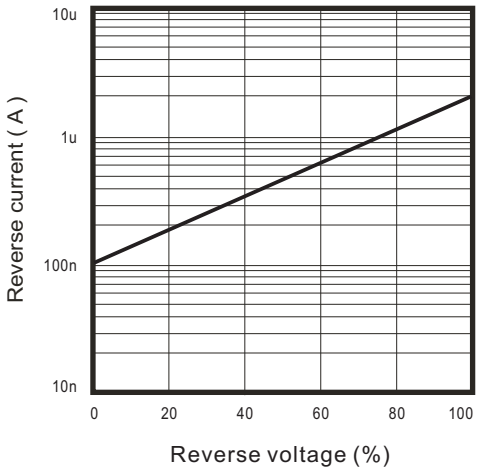


Fig. 3 - Capacitance between terminals characteristics

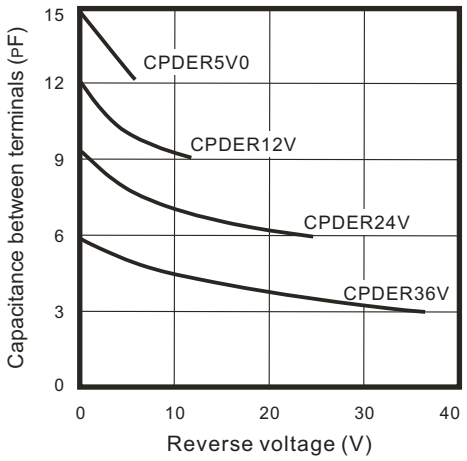


Fig. 4 - Power rating derating curve