

CPDU Series (RoHS Device)



Features

- (16kV) IEC 61000-4-2 rating.
- Surface mount package.
- High component density.

Mechanical data

Case: 0603(1608) standard package, molded plastic.

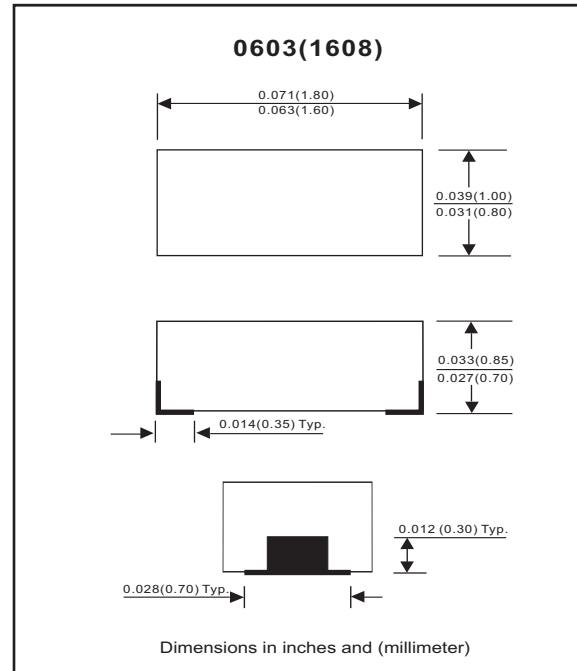
Terminals: Gold plated, solderable per MIL-STD-750, method 2026.

Marking Code:

CPDU5V0: E05
 CPDU12V: E12
 CPDU24V: E24
 CPDU36V: E36

Mounting position: Any

Weight: 0.003 gram(approx.).



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	CPDU5V0 CPDU12V CPDU24V CPDU36V IF = 1mA	V _{BD}	5.1 14 25 38	7.0 17 28 40		V
Leakage current	CPDU5V0 CPDU12V CPDU24V CPDU36V V _R = 5V V _R = 12V V _R = 24V V _R = 36V	I _L		±0.1	±2.0	µA
Capacitance	CPDU5V0 CPDU12V CPDU24V CPDU36V @ 1MHz	C _T		15 12 10 5	20 --- --- ---	pF
Channel clamp voltage	CPDU5V0 CPDU12V CPDU24V CPDU36V 8kV event	V _{ESD}			± 7.0 ± 17 ± 25 ± 40	V
Peak ESD voltage capability	CPDU5V0 CPDU12V CPDU24V CPDU36V IEC 61000-4-2	V _{PV}			16	kV
Peak pulse current	CPDU5V0 CPDU12V CPDU24V CPDU36V 8 / 20 µs	I _{PP} *			5.1 15 15 15	A
Package Power	CPDU5V0 CPDU12V CPDU24V CPDU36V	P			100	mW

* one diode conducting.

RATING AND CHARACTERISTIC CURVES (CPDU Series)

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

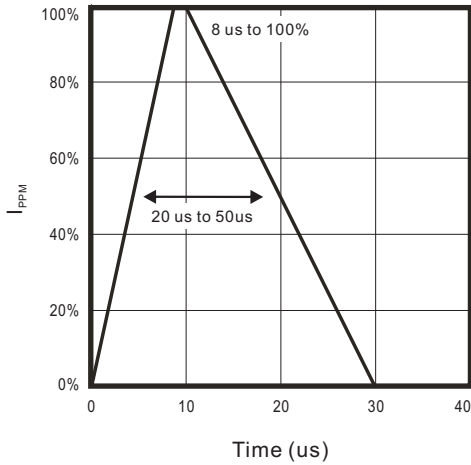


Fig. 2 - Reverse characteristics

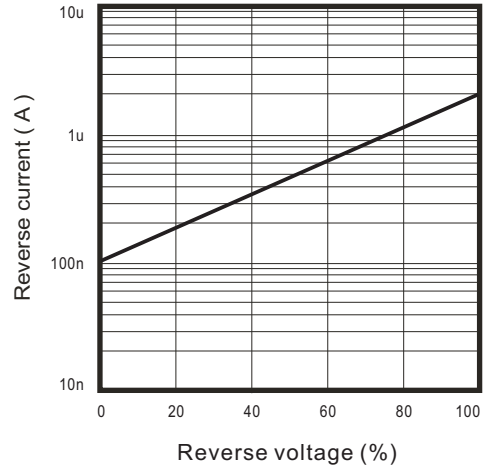


Fig. 3 - Capacitance between terminals characteristics

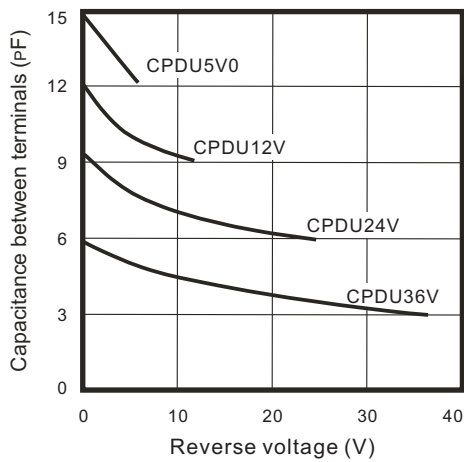


Fig. 4 - Power rating derating curve

