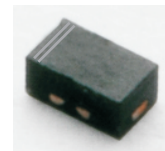


CPDQT3V3U-HF Thru. CPDQT12V0U-HF

RoHS Device
Halogen Free



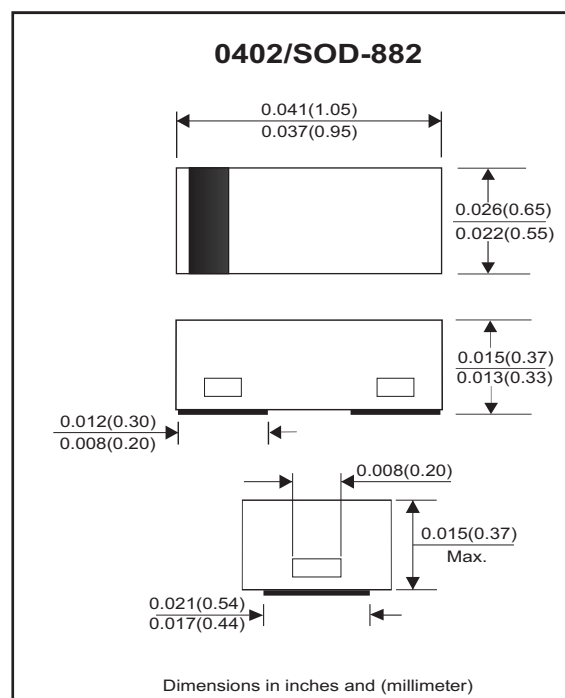
Features

- IEC61000-4-2 Level 4 ESD protection.
- ESD Rating of Class 3 per Human Body Mode.
- Low Leakage
- Response Time is Typically <1ns

Mechanical data

- Case: 0402/SOD-882 small outline plastic package.
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.

Circuit Diagram



Maximum Rating (TA=25°C unless otherwise Specified)

Parameter	Symbol	Value	Unit
Total power dissipation on FR-5 board @TA=25°C (Note 1)	P _D	150	mW
ESD per IEC 61000-4-2(Contact) ESD per IEC 61000-4-2(Air)	V _{ESD}	±8 ±15	kV
Lead Soldering Temperature - Maximum (10 second duration)	T _L	260 (10 sec.)	°C
Junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Notes: 1. FR-5=1.0*0.75*0.62 in.

Electrical Characteristics (TA=25°C unless otherwise noted, VF=0.9V Max.@ IF=10mA for all types)

Part No.	V _{RWN} (V)	I _R (uA) @V _{RWM}	V _{BR} (V) @I _T (Note 2)	I _T (mA)	I _{PP} (A) (Note 3)	V _C (V) @Max I _{PP} (Note 3)	PPK (W) (8*20μs)	C _J (pF)
	Max.	Max.	Min.		Max.	Max.	Typ.	Typ.
CPDQT3V3U-HF	3.3	2.5	5.0	1	9.8	10.4	102	80
CPDQT5V0U-HF	5.0	1.0	6.2	1	8.7	12.3	107	65
CPDQT12V0U-HF	12	1.0	13.3	1	5.9	23.7	140	30

Notes: 1. Other voltage available upon request.

2. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C

3. Surge current waveform per Figure 3.

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

RATING AND CHARACTERISTIC CURVES (CPDQT3V3U-HF Thru. CPDQT12V0U-HF)

Fig.1- Typical Breakdown Voltage Versus Temperature

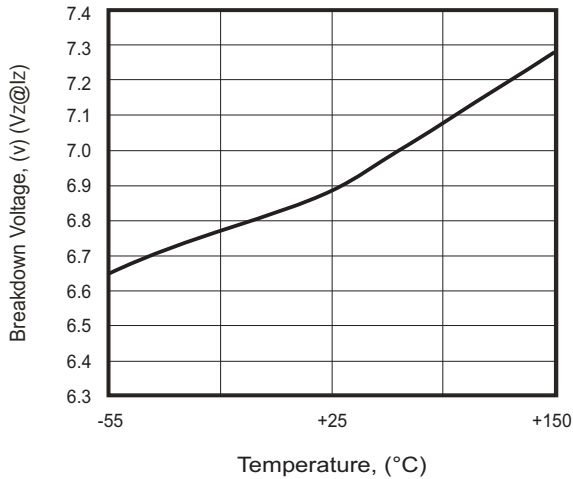


Fig.2- Typical Leakage Current Versus Temperature

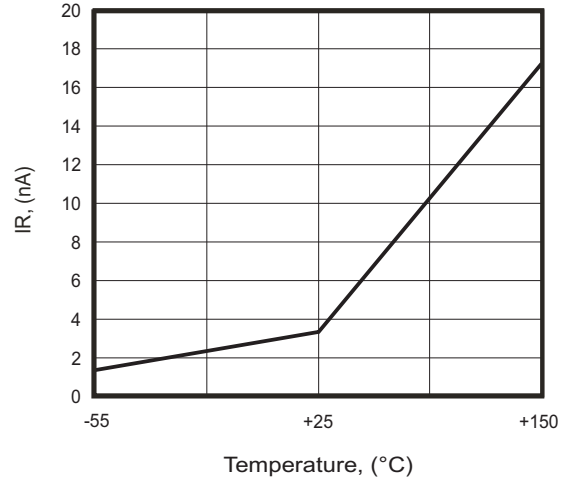


Fig.3- 8/20us Peak Pulse Current Waveform Acc. IEC 6100-4-5

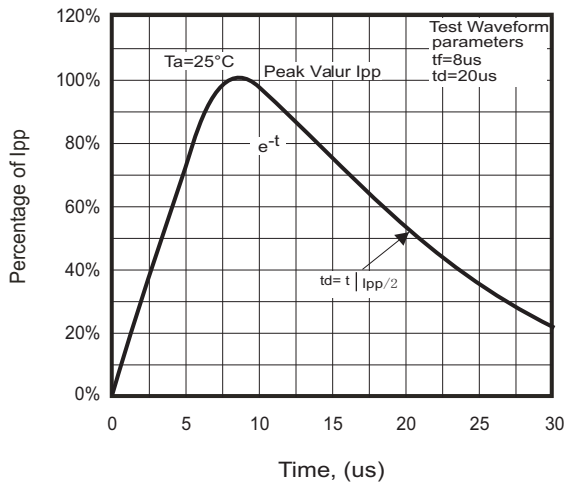
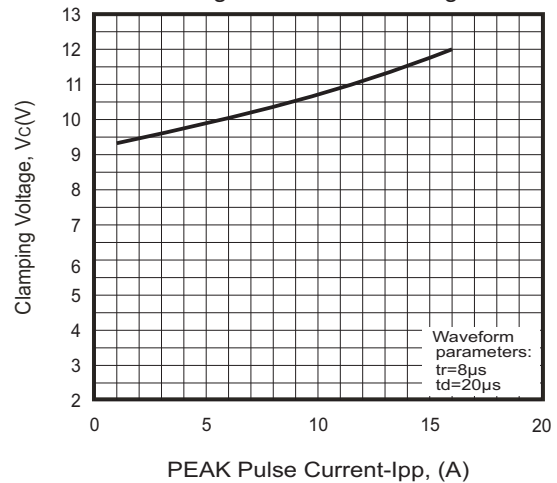
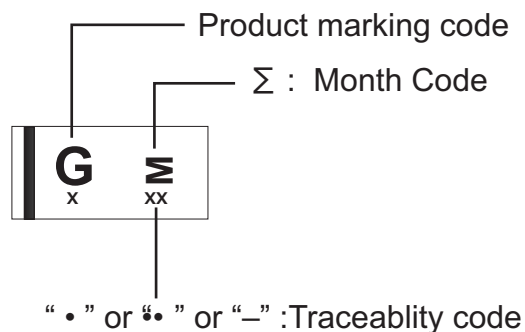


Fig.4- Normalized Junction Capacitance Voltage vs. Reverse Voltage



Marking Code

Part Number	Marking Code
CPDQT3V3U-HF	E
CPDQT5V0U-HF	G
CPDQT12V0U-HF	H



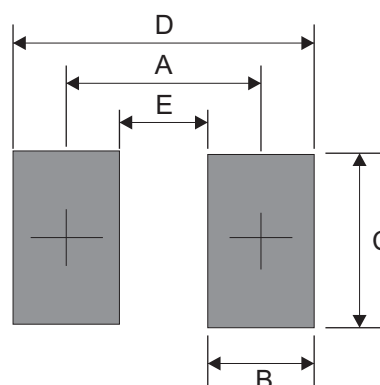
Month Code:

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jan	1	E
Feb	2	F
Wer	3	H
Apr	4	J
May	5	K
Jun	6	L

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z

Suggested PAD Layout

SIZE	0402/SOD-882	
	(mm)	(inch)
A	0.700	0.028
B	0.400	0.016
C	0.700	0.028
D	1.100	0.043
E	0.300	0.012



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0402/SOD-882	10,000	7