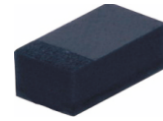


CPDUR12V0U-HF

RoHS Device
Halogen Free



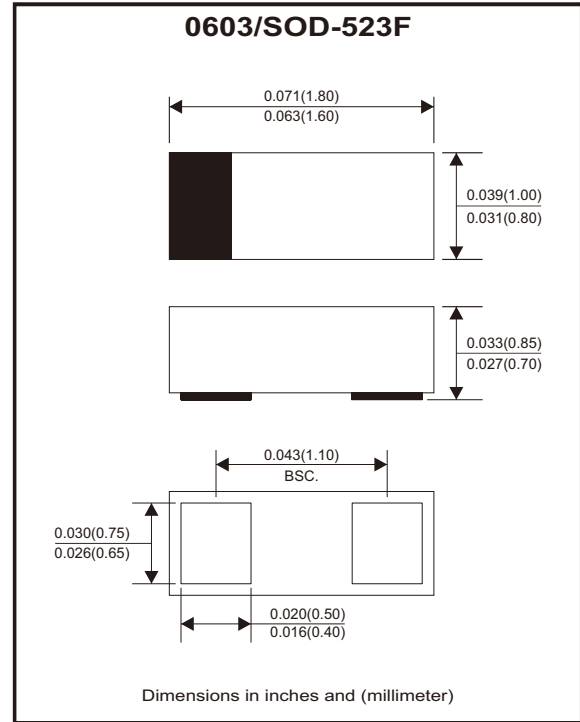
Features

- Uni-directional ESD protection.
- Surface mount package.
- High component density.

Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- Weight: 0.003 grams (approx.).

Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak pulse power		PP			120	W
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			30	kV
Operating temperature range		T _J	-55		125	°C
Storage temperature range		T _{STG}	-55		150	°C

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}	13.3	15.5	17.5	V
Leakage current	V _R = 12V	I _L		0.1	1.0	μA
Clamping voltage	I _{PP} = 1A, T _P = 8/20μs I _{PP} = 5A, T _P = 8/20μs	V _C			19 24	V
Junction capacitance	V _R = 0V, f = 1MHz	C _T			60	pF

Rating and Characteristic Curves (CPDUR12V0U-HF)

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

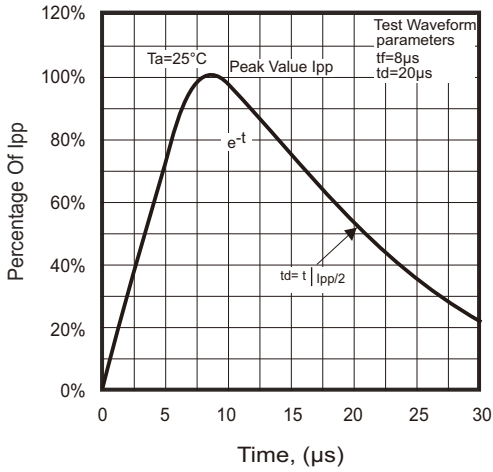


Fig. 2 - Power Rating Derating Curve

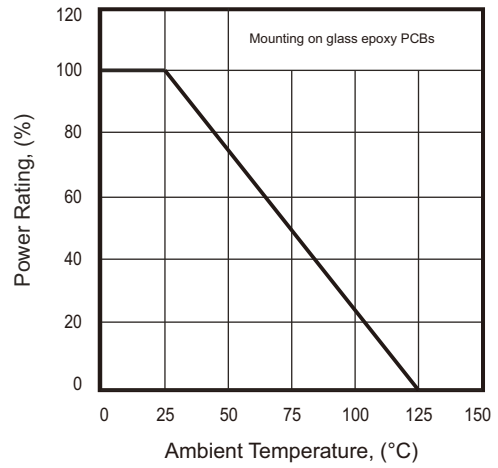


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

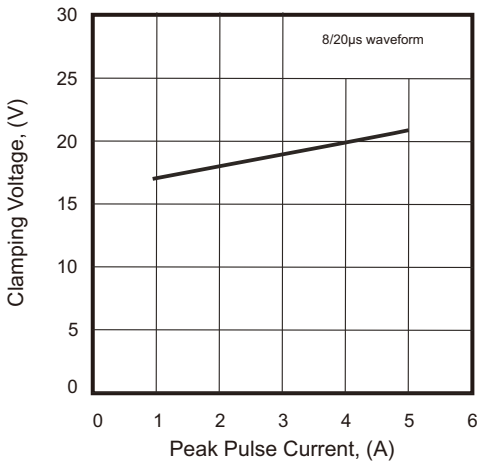


Fig.4 - Clamping Voltage Vs. Forward Peak Pulse Current

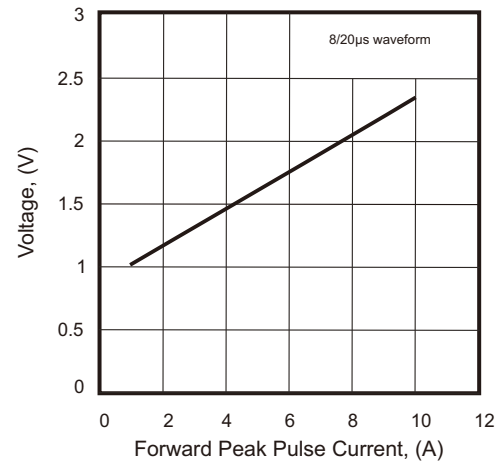
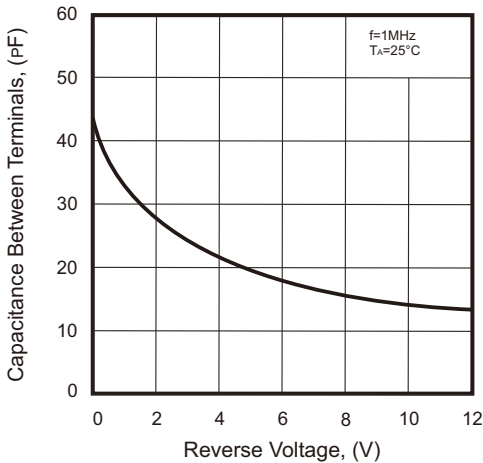


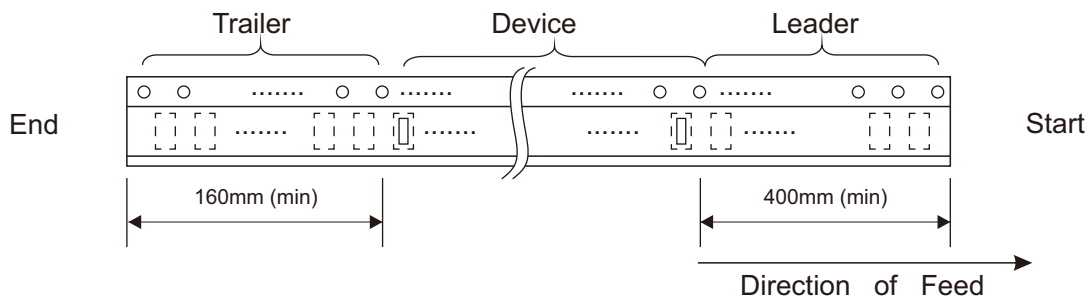
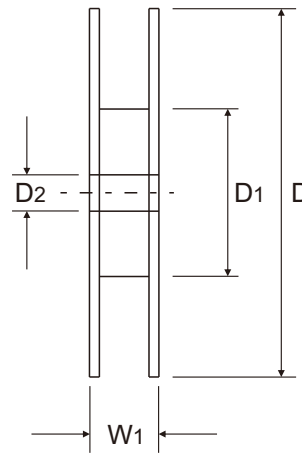
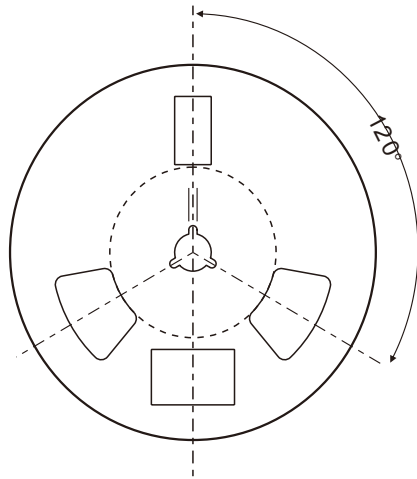
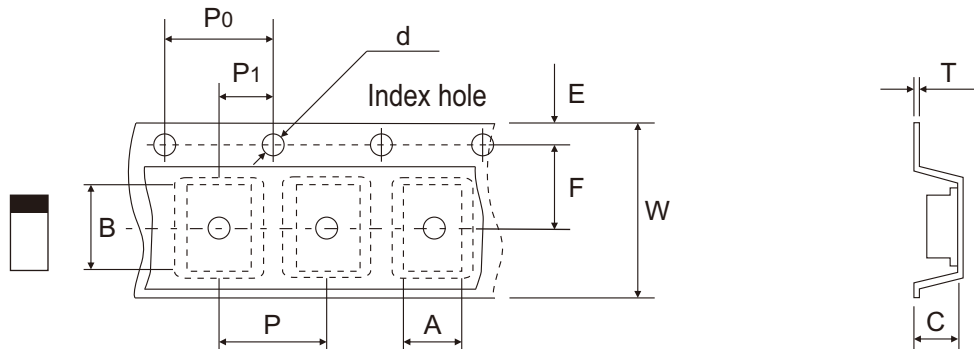
Fig.5 - Capacitance Between Terminals Characteristics



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

REV:C

Reel Taping Specification



0603 (SOD-523F)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.16 ± 0.10	1.90 ± 0.10	0.95 ± 0.10	1.50 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.046 ± 0.004	0.075 ± 0.004	0.037 ± 0.004	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

0603 (SOD-523F)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.22 ± 0.03	8.00 ± 0.20	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.315 ± 0.008	0.472 + 0.020 - 0.000

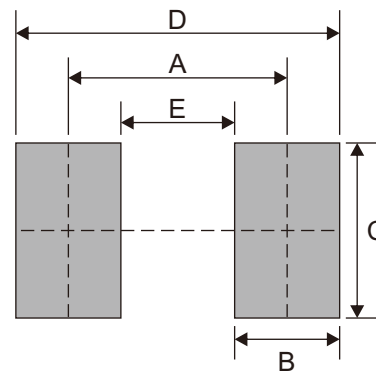
Marking Code

Part Number	Marking Code
CPDUR12V0U-HF	E12



Suggested P.C.B. PAD Layout

SIZE	0603/SOD-523F	
	(mm)	(inch)
A	1.25	0.049
B	0.60	0.024
C	1.00	0.039
D	1.85	0.073
E	0.65	0.026



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0603/SOD-523F	4,000	7

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Comchip manufacturer](#):

Other Similar products are found below :

[CDBB260-G](#) [CPDA10R5V0P-HF](#) [CDBA340L-HF](#) [CDSQR400B-HF](#) [ACGRC307-HF](#) [1N5819T-G](#) [P6KE550CA-HF](#) [CDBM140-HF](#)
[CDBMT1100-HF](#) [CZRU52C5V6](#) [CDBF0245](#) [CDBU0530-HF](#) [CPDU5V0U-HF](#) [CDBB540-HF](#) [CZRU52C3V9](#) [ACDBA1200-HF](#)
[CDBHM140L-HF](#) [ACGRKM4007-HF](#) [CPDU12V-HF](#) [CDBMT160-HF](#) [CZRER52C2](#) [CPDV5-3V3UP](#) [ACPDQC5V0C-HF](#) [DF206ST-G](#)
[1.5KE36A-G](#) [CDBQR0230L-HF](#) [CDBHM160L-HF](#) [CZRU52C13-HF](#) [CZRU5V1B](#) [CDBA2200-HF](#) [CDBQR54-HF](#) [ZENER-KIT](#)
[CGRA4004-G](#) [CGRM4007-HF](#) [KBPC1501-G](#) [CURMT104-HF](#) [CDBQR70-HF](#) [CDBA140-HF](#) [CDSQR4148-HF](#) [KBPC2504-G](#)
[ACGRAS1W-HF](#) [CDBU0130L-HF](#) [CDBUR0140L-HF](#) [ACDBA560-HF](#) [CPDU5V0-HF](#) [KBPC5004-G](#) [ACGRA4001-HF](#) [CDBUR70](#)
[DB106-G](#) [KBPC1502-G](#)