



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

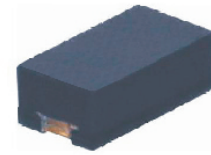
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



CPDU5V0C-HF

RoHS Device

Halogen Free

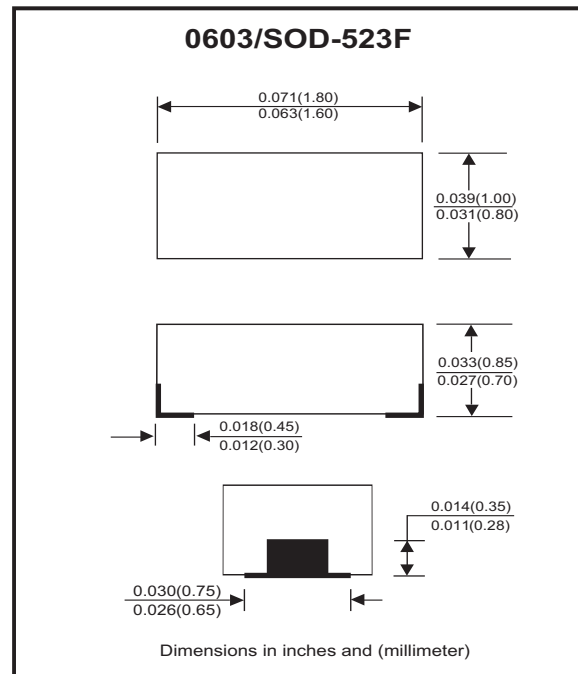


Features

- Bi-directional ESD protection.
- Surface mount package.
- Operating voltage: 5V.

Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking Code:
CPDU5V0C-HF: E05
- Mounting position: Any.
- Weight: 0.003 grams(approx.).



Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	I _R = 1mA	V _{BD}	6.1	7		V
Leakage current	V _R = 5V	I _L		0.1	2	uA
Junction capacitance	V _R = 0V, f = 1MHz	C _T		25	30	pF
ESD capability	IEC 61000-4-2(air)	ESD			16	kV
	IEC 61000-4-2(contact)				8	
Clamping Voltage	I _{PP} = 1 A, t _p =8/20us	V _c			10	V
	I _{PP} = 4 A, t _p =8/20us	V _c			17	V
Operation temperature		T _j	-55		125	°C
Storage temperature		T _{STG}	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDU5V0C-HF)

Fig. 1 - Reverse characteristics

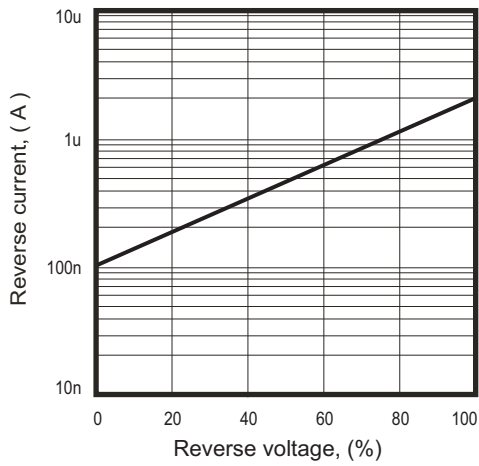


Fig. 2 - Capacitance between terminals characteristics

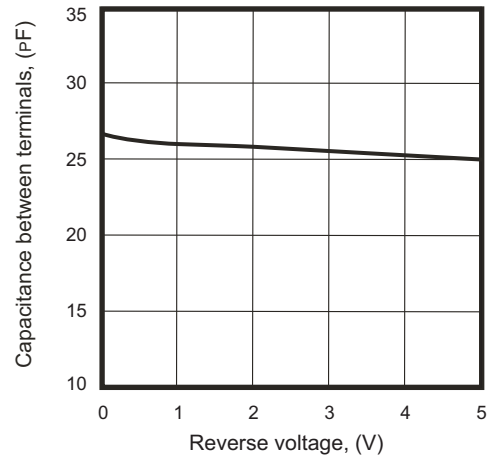


Fig.3 - Clamping voltage vs. peak pulse current

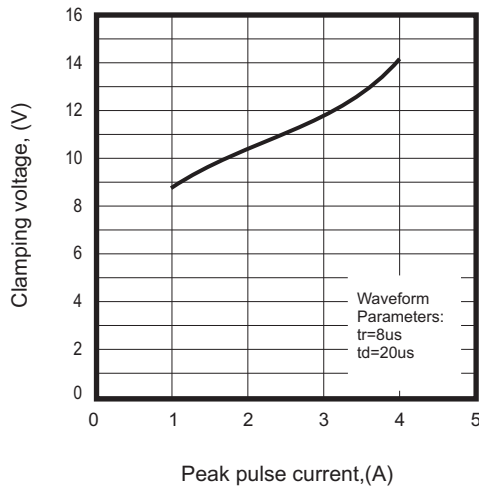
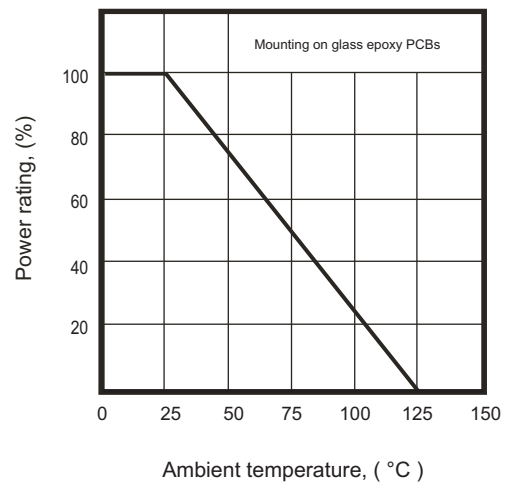
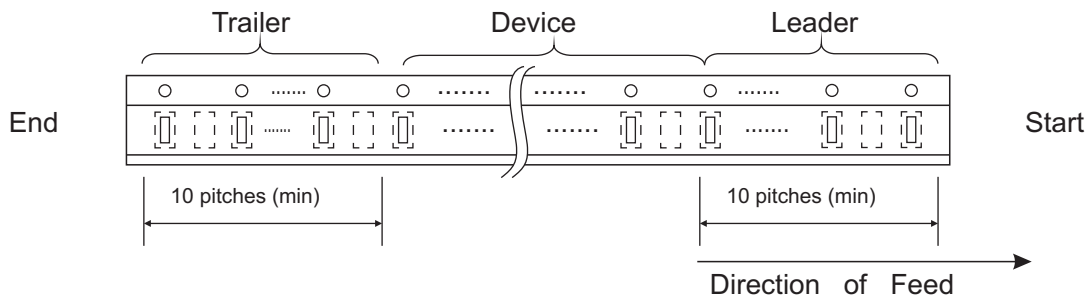
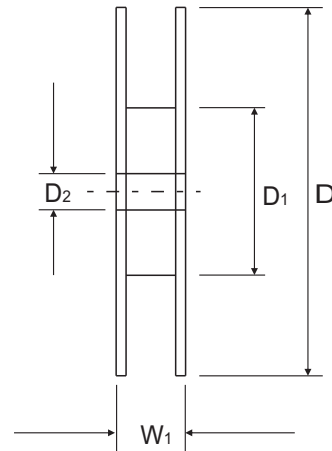
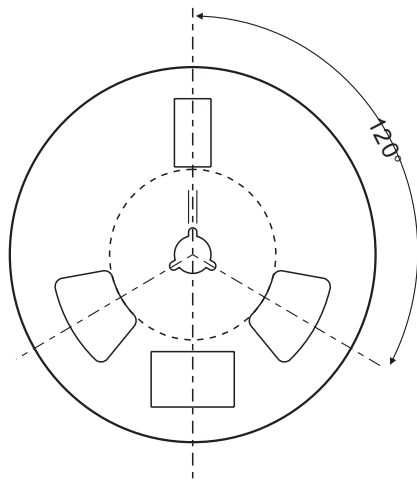
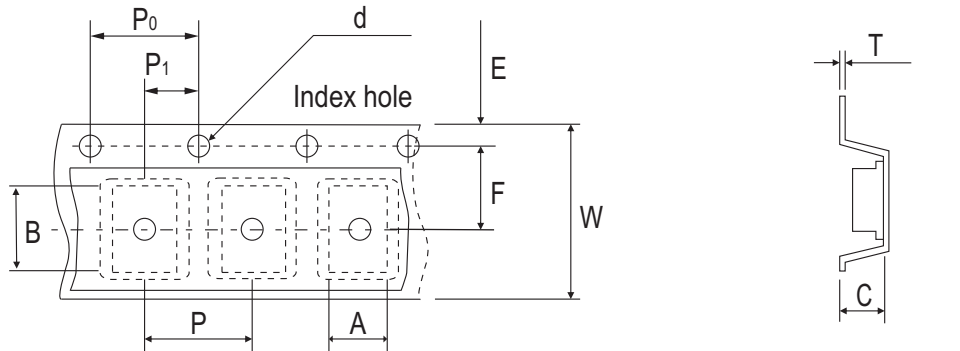


Fig. 4 - Power rating derating curve



Reel Taping Specification



0603 (SOD-523)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.00 ± 0.10	1.85 ± 0.10	1.00 ± 0.10	1.55 ± 0.05	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.039 ± 0.004	0.073 ± 0.004	0.039 ± 0.004	0.061 ± 0.002	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0603 (SOD-523)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.20	13.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

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

REV:D

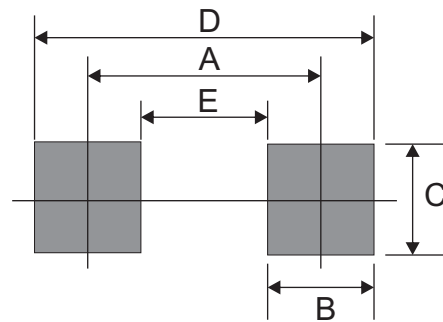
Marking Code

Part Number	Marking Code
CPDU5V0C-HF	E05

E05

Suggested PAD Layout

SIZE	0603/SOD-523F	
	(mm)	(inch)
A	1.70	0.067
B	0.60	0.024
C	0.80	0.031
D	2.30	0.091
E	1.10	0.043



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0603/SOD-523F	4,000	7