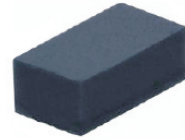


CPDUR9V0LP-HF

RoHS Device
Halogen Free

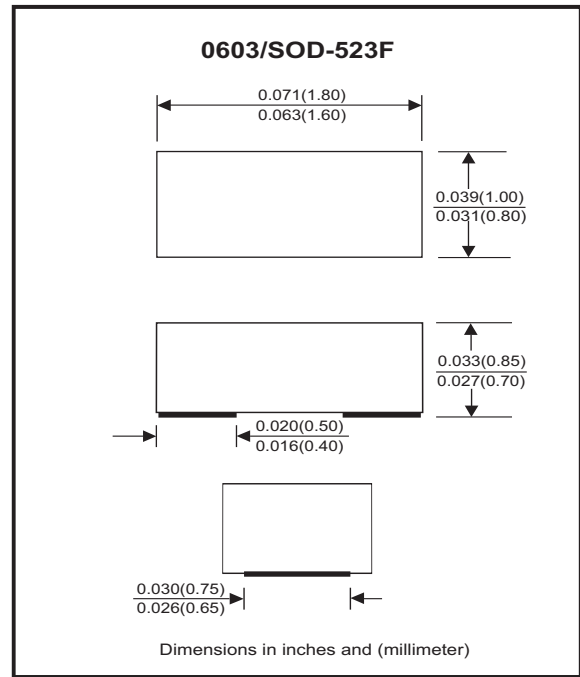


Features

- Bi-directional ESD protection.
- Surface mount package.
- Low leakage current.
- High component density.

Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking Code: E9P
- Mounting position: Any.
- Weight: 0.003 grams(approx.).



Circuit Diagram



Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V_{RWM}			9.0	V
Breakdown voltage	$I_R = 5\text{mA}$	V_{BD}	9.6		14.4	V
Leakage current	$V_R = 9\text{V}$	I_R			100	nA
Clamping voltage	$I_{PP}=0.1\text{A}$, $t_p=8/20\mu\text{s}$ $I_{PP}=0.5\text{A}$, $t_p=8/20\mu\text{s}$	V_C			16 19	V
Peak pulse power	$t_p= 8/20$	P_{PK}		8.5		W
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			15 8	kV
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_T		1.0		pF
Operation temperature range		T_j	-55		150	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55		150	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES (CPDUR9V0LP-HF)

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

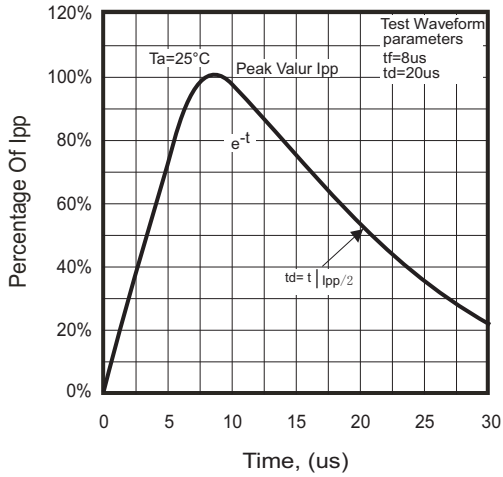


Fig.2 - Power Rating Derating Curve

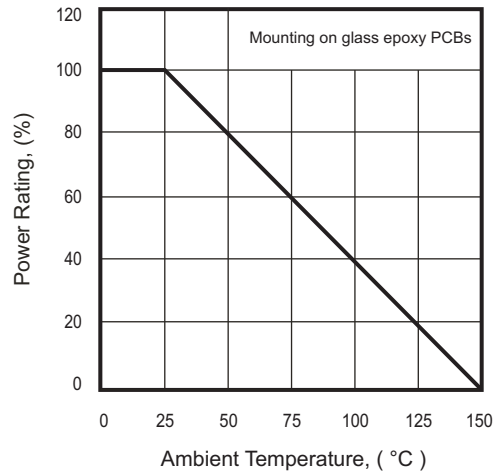


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

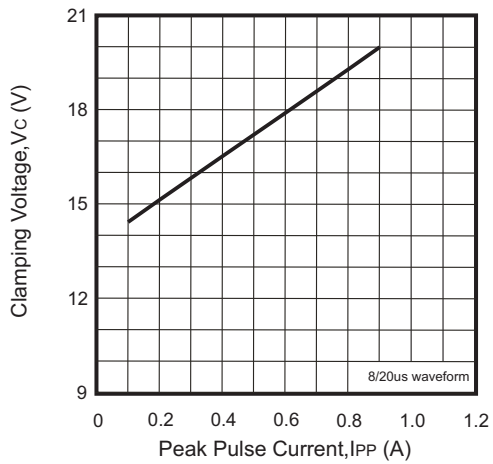
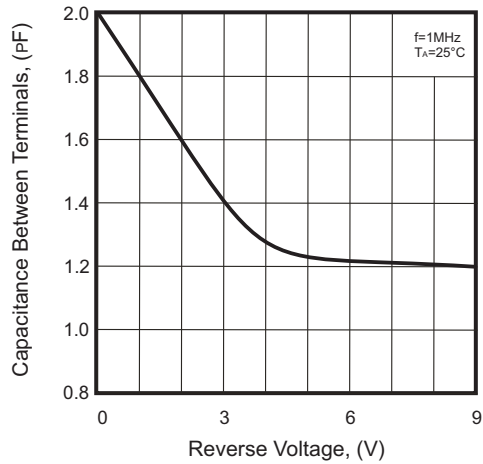
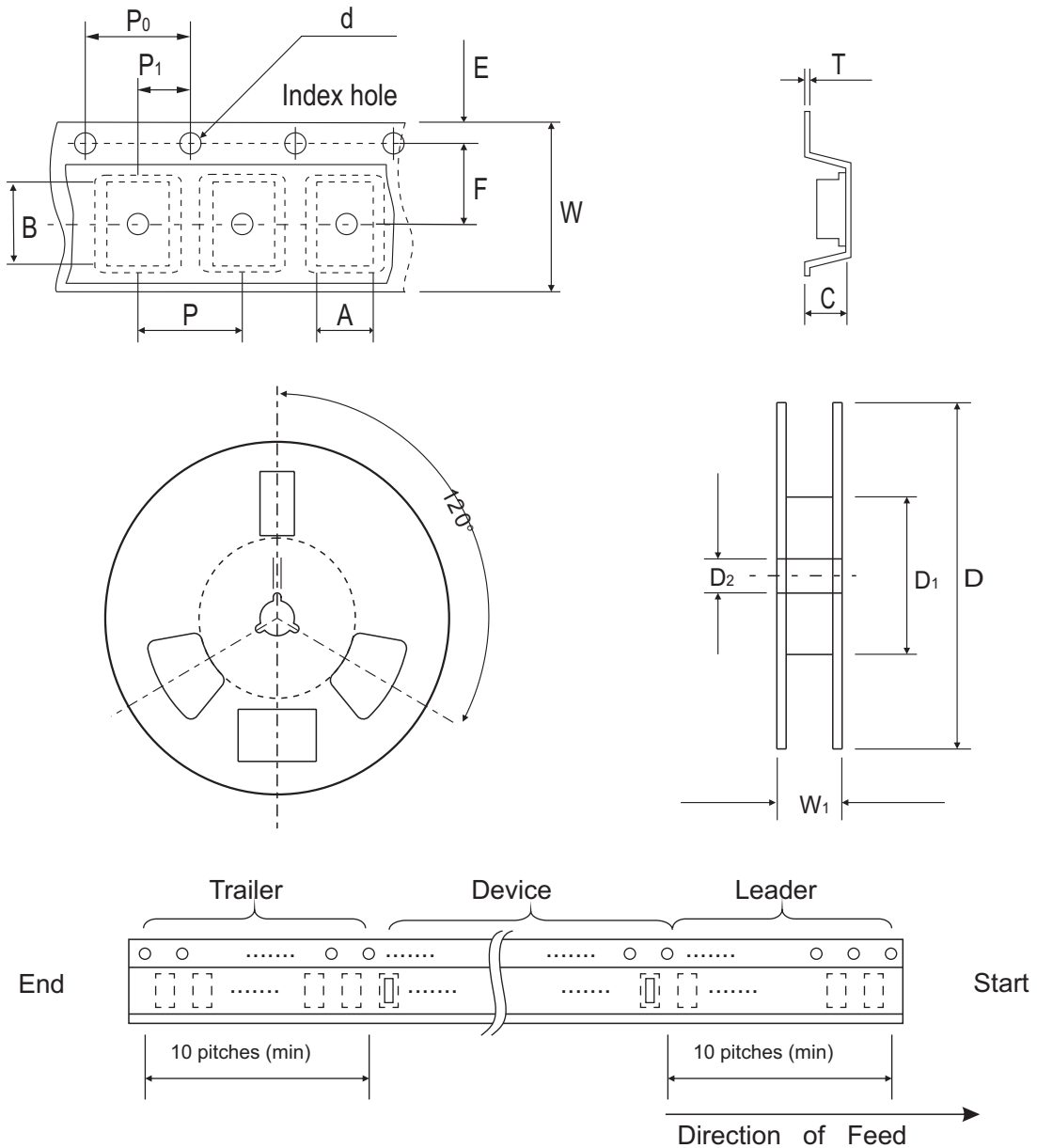


Fig.4 - Capacitance Between Terminals Characteristics



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 ± 1.00	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	13.50 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

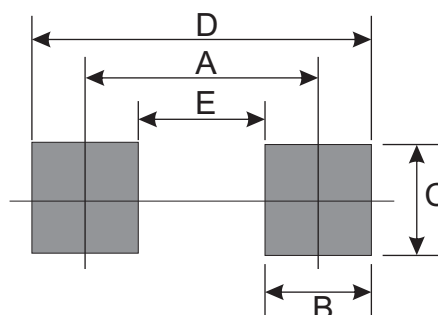
Marking Code

Part Number	Marking Code
CPDUR9V0LP-HF	E9P



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