

CPDQC5V0USP-IPHF

RoHS Device
Halogen Free



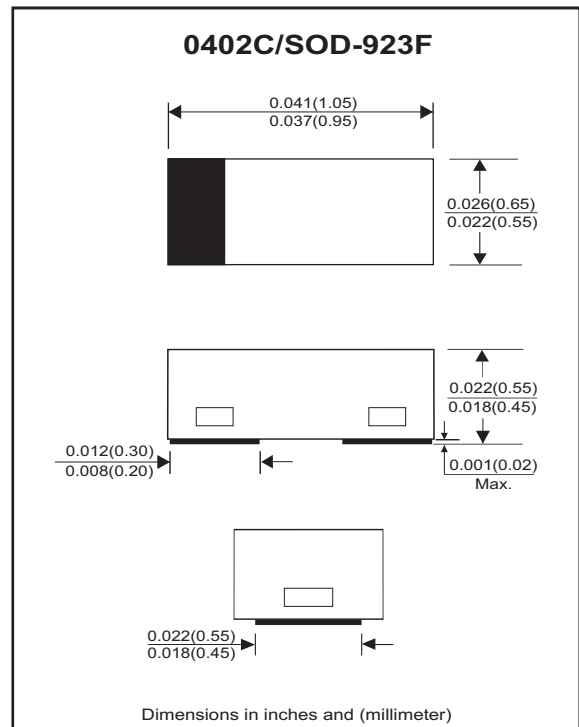
Features

- IEC61000-4-2 (ESD) $\pm 10\text{kV}$
- Working Voltage: 5V
- Typical capacitance: 0.3pF

Mechanical data

- Case: 0402C/SOD-923F small outline plastic package. molded plastic.
- Terminals: Matte tin plated, solderable per MIL-STD-202, method 208.
- Mounting position: Any.
- High temperature soldering guaranteed:
260°C/10 second.
- Weight: 0.001 grams(approx.).

Circuit diagram



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

Parameter	Symbol	Value	Unit
Peak pulse current ($t_p = 8/20\mu\text{s}$ waveform)	PPP	30	W
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	VESD	± 10	kV
Operating temperature rang	TJ	-55 to +150	°C
Storage temperature rang	TSTG	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-Off voltage		VRWM	-	-	5	V
Reverse leakage current	VR = 5 V	IR	-	-	100	nA
Reverse breakdown voltage	IR = 1 mA	V(BR)	6	-	9	V
Clamping voltage	IPP = 1 A	VC	-	-	12	V
	IPP = 2 A	VC	-	-	15	V
Junction capacitance	VR = 0V , F=1MHz	CJ	-	0.3	0.5	pF

RATING AND CHARACTERISTIC CURVES (CPDQC5V0USP-IPHF)

Fig.1 - 8/20us Peak Pulse Current
Waveform Acc. IEC61000-4-5

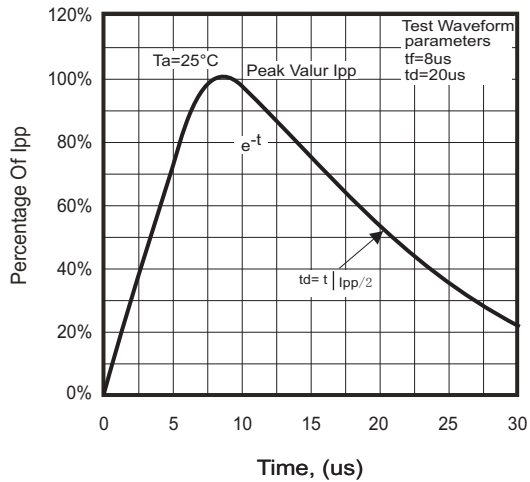


Fig.2 - Power Rating Derating Curve

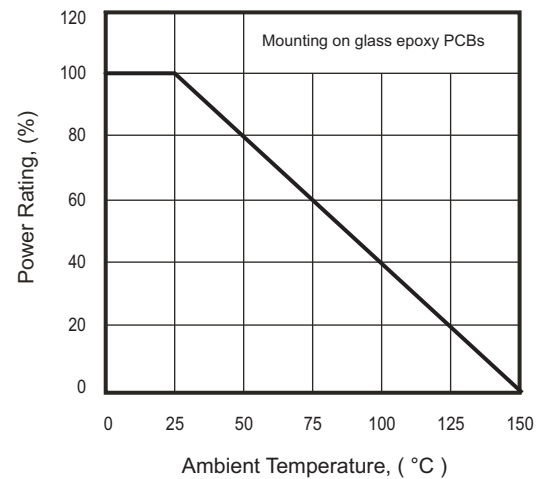


Fig.3 - Clamping Voltage Vs.
Peak Pulse Current

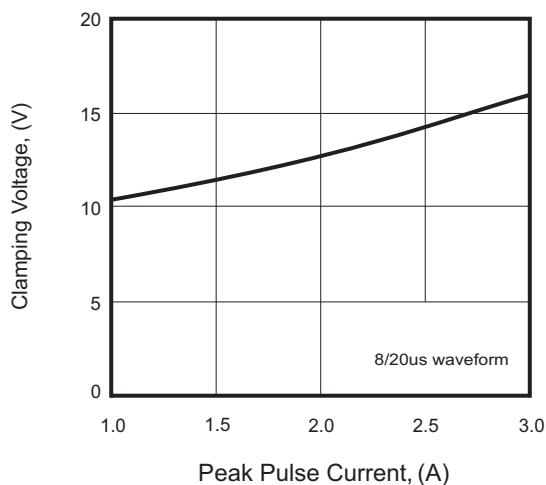
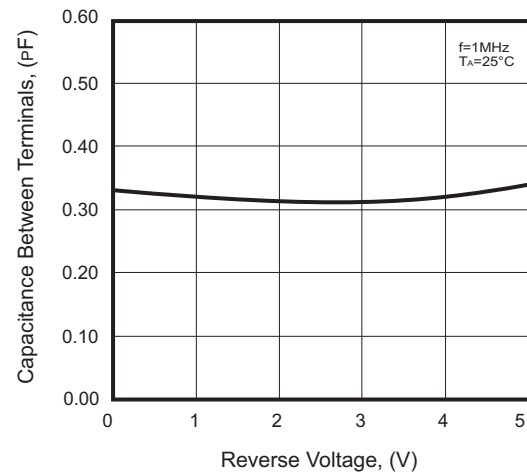
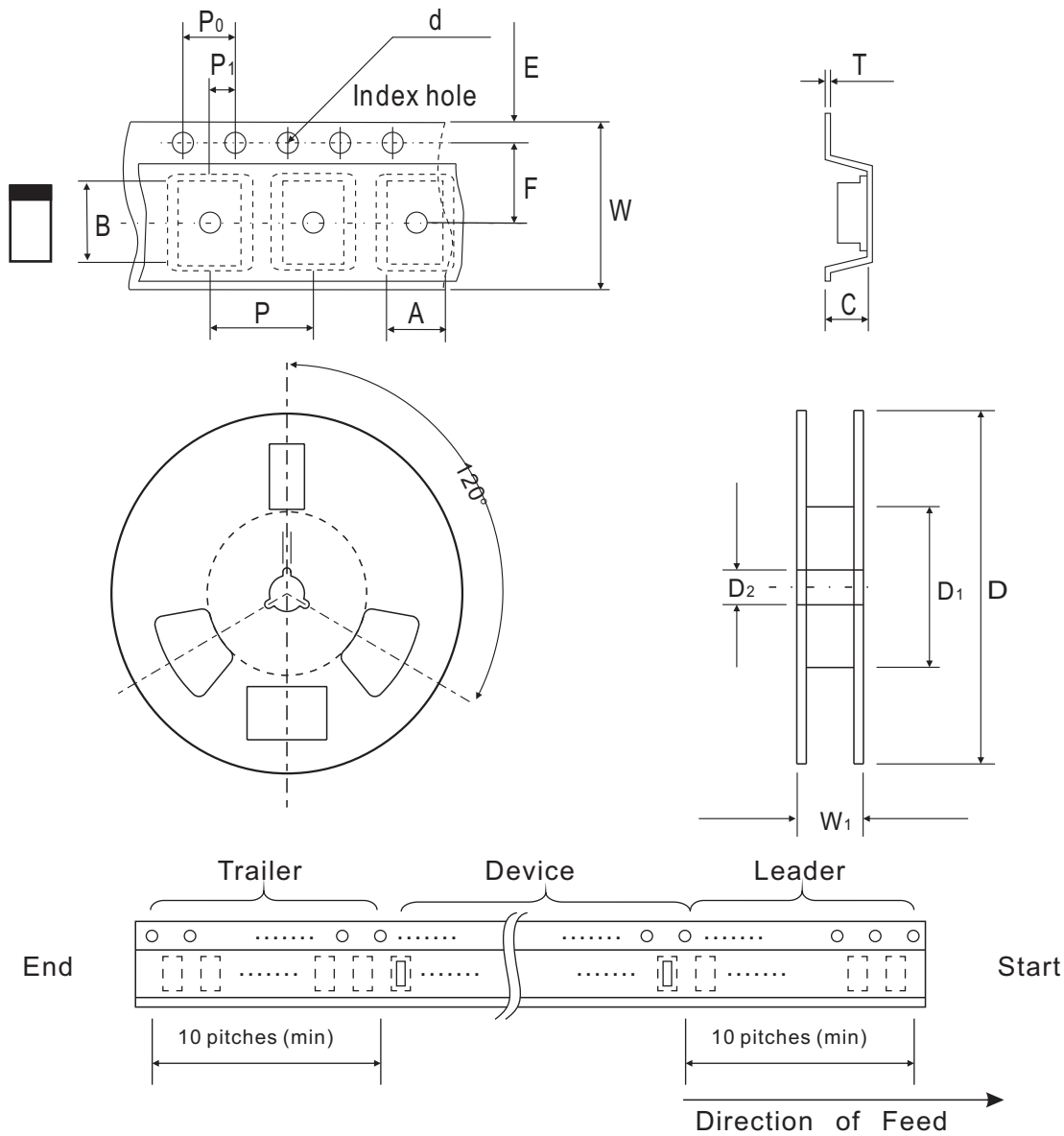


Fig.4 - Capacitance Between
Terminals Characteristics



Reel Taping Specification



0402C/ SOD-923F	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.75 ± 0.10	1.15 ± 0.10	0.60 ± 0.10	1.55 ± 0.10	178 ± 1.00	60.0 MIN.	13.0 ± 0.20
	(inch)	0.030 ± 0.004	0.045 ± 0.004	0.024 ± 0.004	0.061 ± 0.004	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0402C/ SOD-923F	SYMBOL	E	F	P	P ₀	P ₁	T	W	W
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.22 ± 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 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

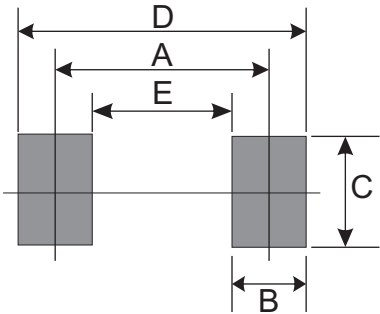
Marking Code

Part Number	Marking Code
CPDQC5V0USP-IPHF	5S



Suggested PAD Layout

SIZE	0402C/SOD-923F	
	(mm)	(inch)
A	0.70	0.028
B	0.40	0.016
C	0.70	0.028
D	1.10	0.043
E	0.30	0.012



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0402C/SOD-923F	5,000	7