

CPDR3-5V0UB-HF

RoHS Device

Halogen Free



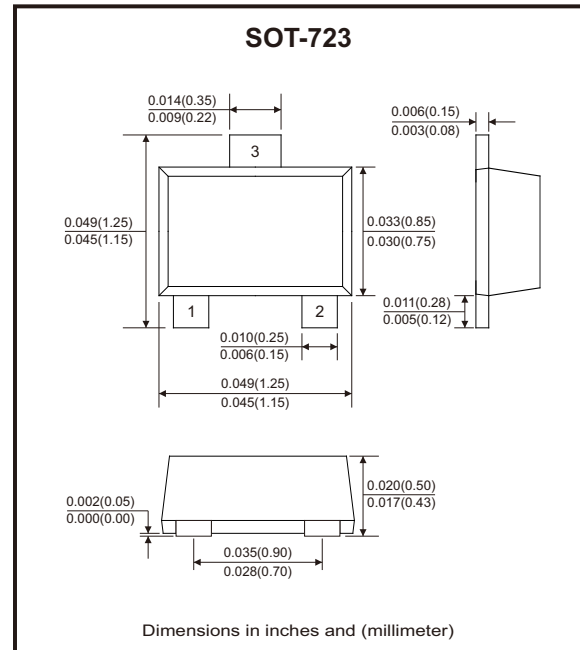
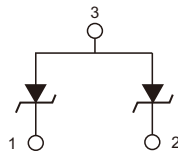
Features

- Up to 2 lines protects.
- Low clamping voltage.
- Low leakage current.
- Working voltage: 5V.

Mechanical data

- Case: SOT-723, molded plastic.
- Lead finish: Matte tin.
- Mounting position: Any.

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak pulse power (tp=8/20μs waveform)	P _{PP}	90	W
Peak pulse current (8/20μs)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±18	kV
ESD per IEC 61000-4-2 (Contact)		±15	
Operating temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse working voltage		V _{RWM}			5	V
Reverse breakdown voltage	I _R = 1mA	V _{BR}	6		9	V
Reverse leakage current	V _R = 5V	I _R			0.2	μA
Clamping voltage	I _{PP} = 1A, T _P = 8/20μs	V _C			12	V
	I _{PP} = 5A, T _P = 8/20μs	V _C			18	
Junction capacitance	V _R = 0V, f = 1MHz	C _J			1.2	pF

Typical Rating and Characteristic Curves (CPDR3-5V0UB-HF)

Fig.1 - Power Rating Derating Curve

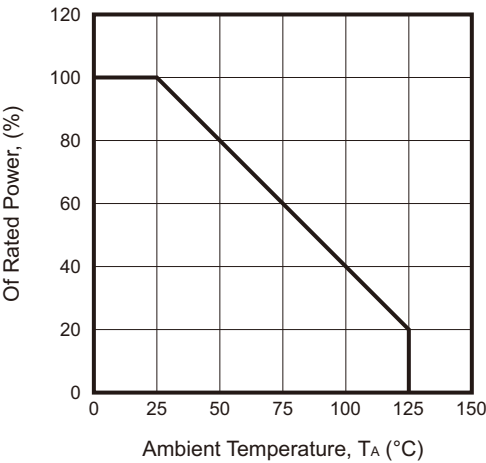


Fig.2 - Pulse Waveform

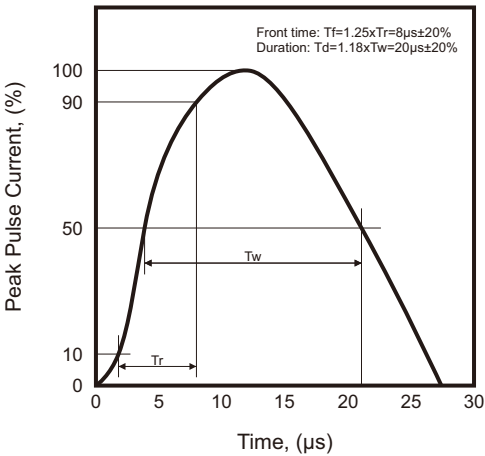


Fig.3 - Capacitance Between Terminals Characteristics

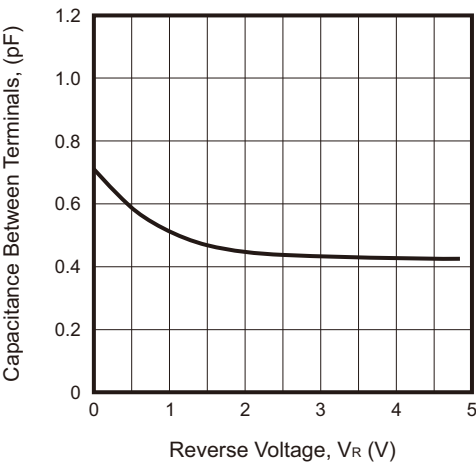
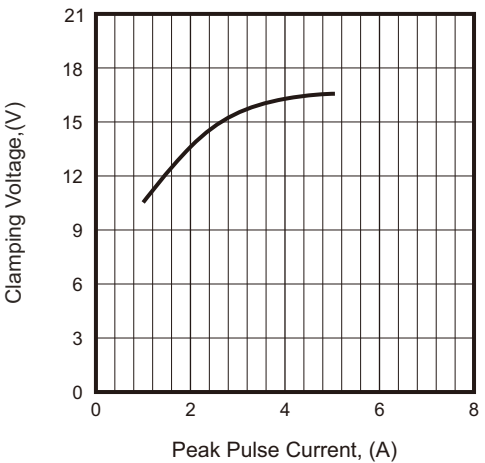
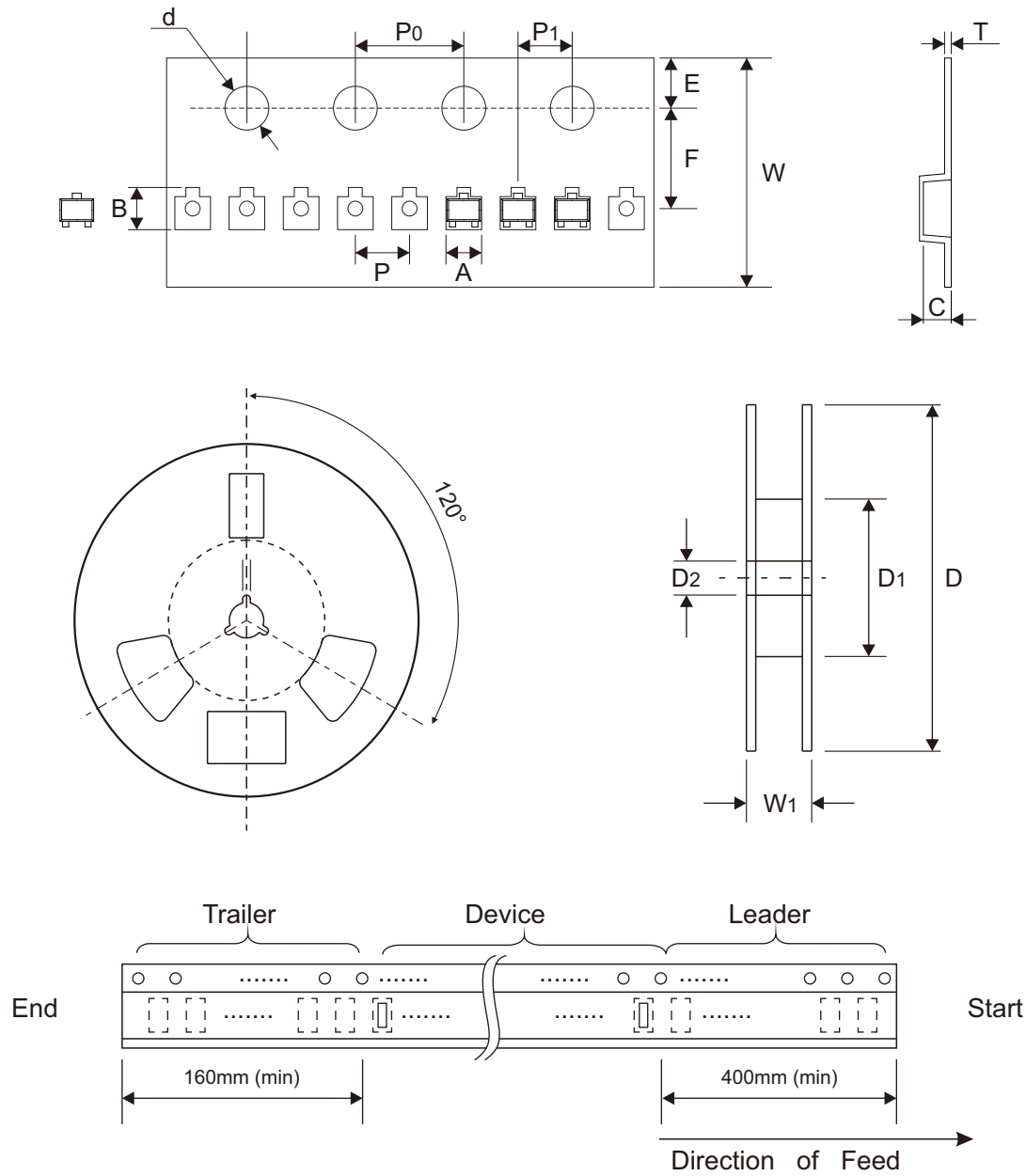


Fig.4 - Clamping Voltage vs. Peak Pulse Current



Reel Taping Specification

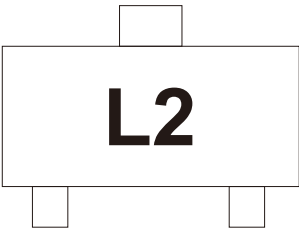


	SYMBOL	A	B	C	d	D	D1	D2
SOT-723	(mm)	1.40 ± 0.03	1.45 ± 0.05	0.61 ± 0.05	1.50 + 0.10 - 0.00	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.055 ± 0.001	0.057 ± 0.002	0.024 ± 0.002	0.059 + 0.004 - 0.000	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

	SYMBOL	E	F	P	P0	P1	T	W	W1
SOT-723	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.05	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.002	0.315 + 0.012 - 0.004	0.484 ± 0.039

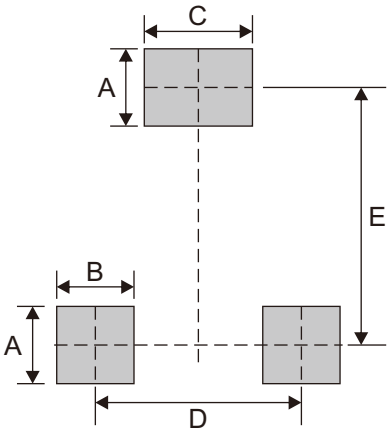
Marking Code

Part Number	Marking Code
CPDR3-5V0UB-HF	L2



Suggested P.C.B. PAD Layout

SIZE	SOT-723	
	(mm)	(inch)
A	0.40	0.016
B	0.40	0.016
C	0.45	0.018
D	0.80	0.031
E	1.10	0.043



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-723	8,000	7