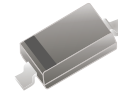


CPDV4V5HTU-HF

RoHS Device
Halogen Free

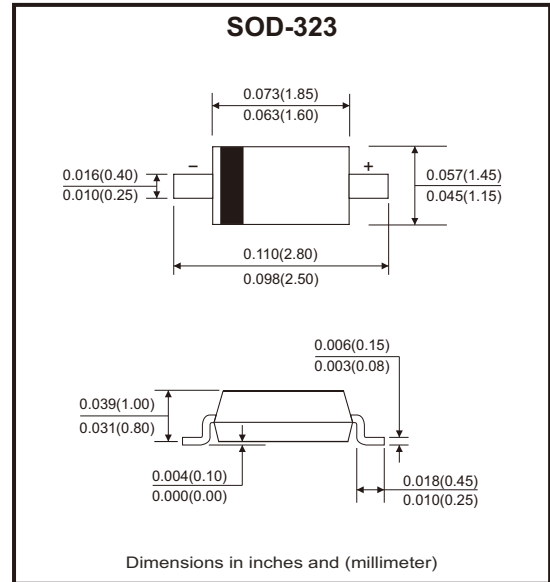


Features

- 2-pin lead-less package.
- IEC 61000-4-2 (ESD) ± 30 kV (air/contact)
- Working voltage: 4.5V.
- Low clamping voltage.
- Low leakage current.

Mechanical data

- Case: SOD-323, molded plastic.
- Terminal: Matte Tin plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode end.
- Mounting position: Any.



Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu\text{s}$	P_{PP}	2775	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	I_{PP}	185	A
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD	± 30	kV
Operating junction temperature range		T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		V_{RWM}			4.5	V
Breakdown voltage	$I_T = 1\text{mA}$	V_{BR}	4.8			V
Reverse leakage current	$V_R = 4.5\text{V}$	I_R			0.2	μA
Clamping voltage	$I_{PP} = 1\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			7	V
	$I_{PP} = 185\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			15	
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		420	600	pF

Typical Rating and Characteristic Curves (CPDV4V5HTU-HF)

Fig.1 - Power Rating Derating Curve

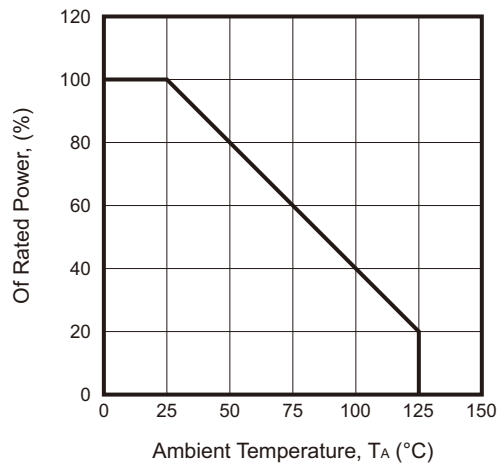


Fig.2 - Pulse Waveform

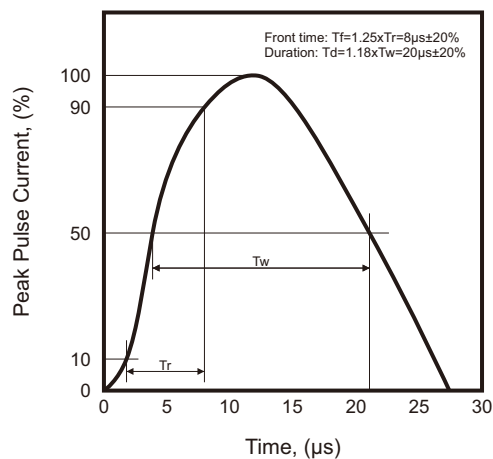


Fig.3 - Capacitance Between Terminals Characteristics

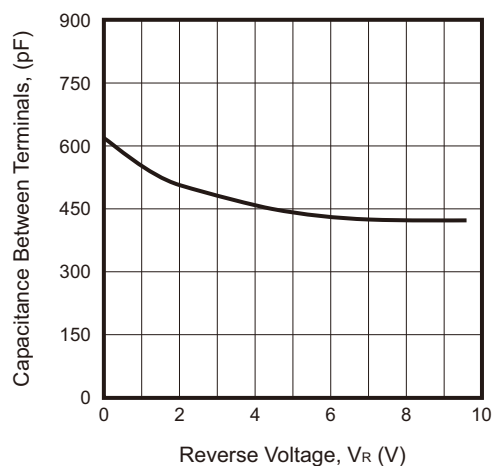
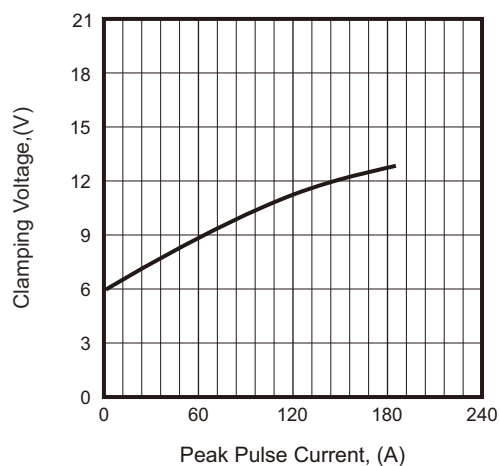


Fig.4 - Clamping Voltage vs. Peak Pulse Current

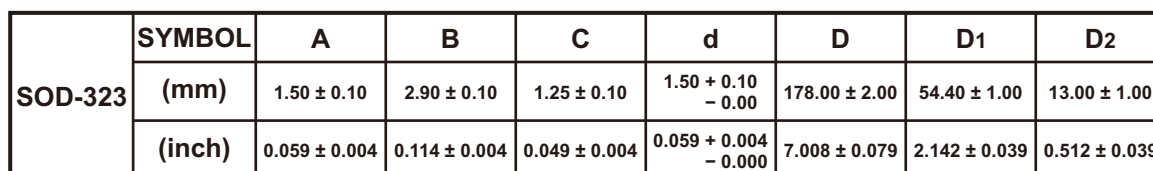
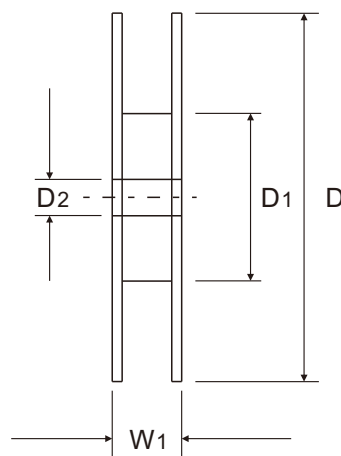
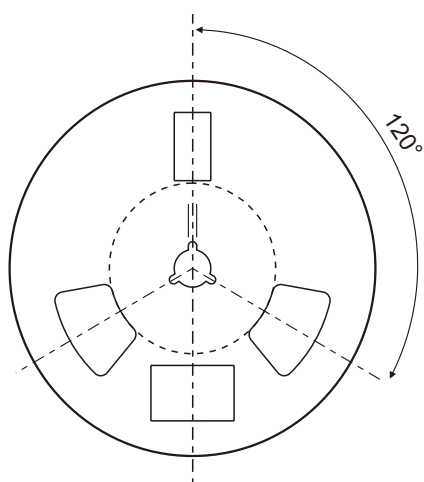


Technical drawing of a mechanical component, likely a bracket or support, showing dimensions and cross-sections. The main view is a top-down perspective. Dimensions include:

- P_0 : Horizontal distance from the left edge to the center of the first hole.
- P_1 : Horizontal distance from the center of the first hole to the center of the second hole.
- d : Diameter of the holes.
- E : Vertical distance from the top edge to the center of the holes.
- F : Vertical distance from the center of the holes to the bottom edge.
- W : Total vertical width of the component.
- P : Horizontal distance between the centers of the two outer holes.
- A : Horizontal distance from the center of the middle hole to the right edge.

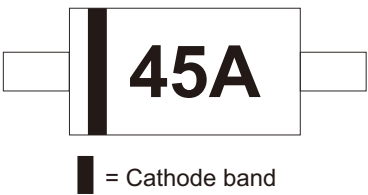
Two cross-sectional views are shown on the right:

- The top cross-section shows a T-shaped profile with dimensions B (total height) and C (width of the base).
- The bottom cross-section shows a similar T-shaped profile with dimensions T (thickness of the top flange) and C (width of the base).

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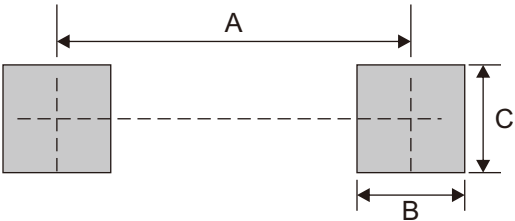
Marking Code

Part Number	Marking Code
CPDV4V5HTU-HF	45A



Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.30	0.091
B	0.70	0.028
C	0.70	0.028



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7