

CPDVR085V0C-HF (RoHS Device)

Features

Halogen free.

Bi-directional ESD protection.

IEC61000-4-2 8kV(Contact), 16kV(air).

Operating voltage: 5V.

Mechanical data

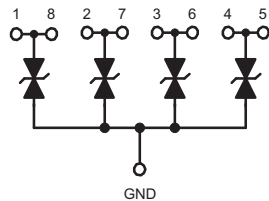
Case: SOT-383F Standard package,
molded plastic.

Terminals: Gold plated, solderable per
MIL-STD-750D, method 2026.

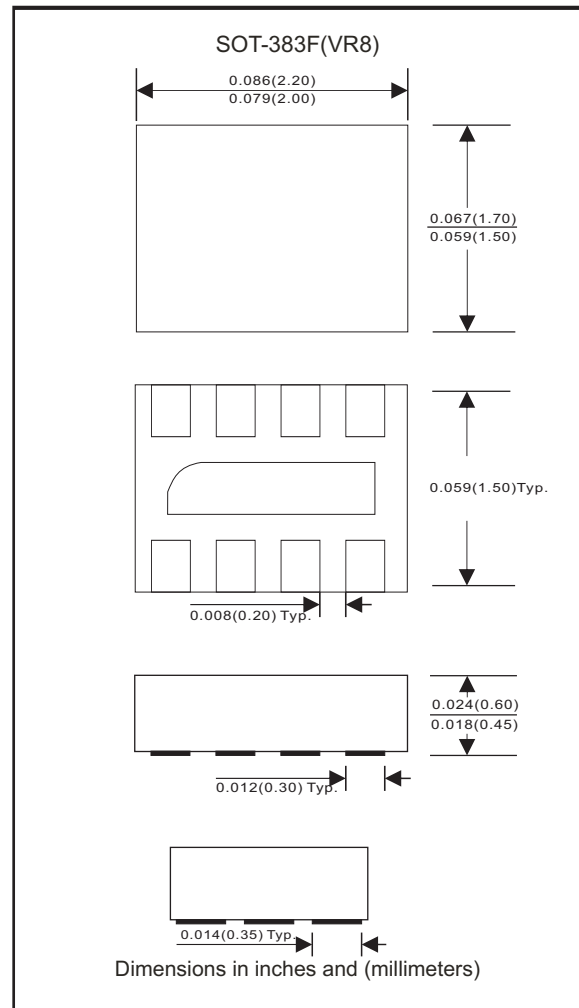
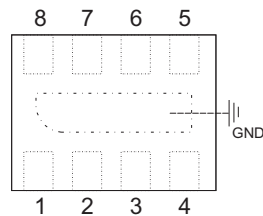
Marking code: E05

Mounting position: Any.

Circuit Diagram



Package



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	$I_R = 1\text{mA}$	V_{BD}	6.1	7.0		V
Leakage current	$V_R = 5\text{V}$	I_L		0.1	2.0	μA
Junction capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_T		25	30	pF
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			16 8	kV
Operation temperature		T_j			125	°C
Storage temperature		T_{STG}	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDVR085V0C-HF)

Fig. 1 - Reverse characteristics

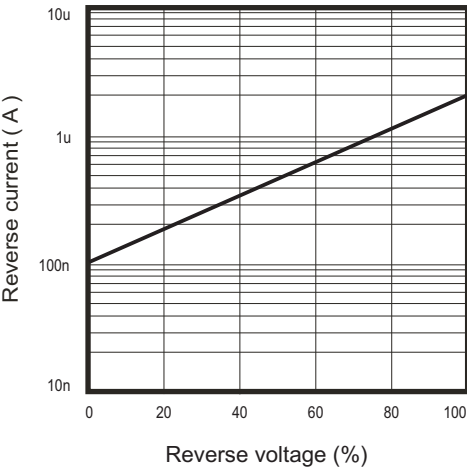


Fig. 2 - Capacitance between terminals characteristics

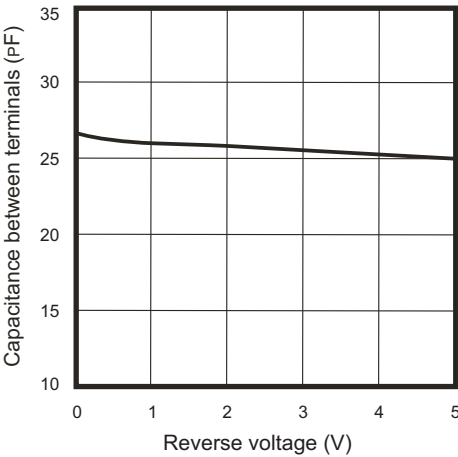
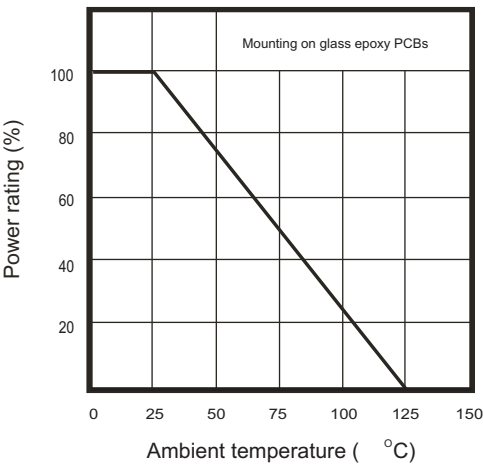
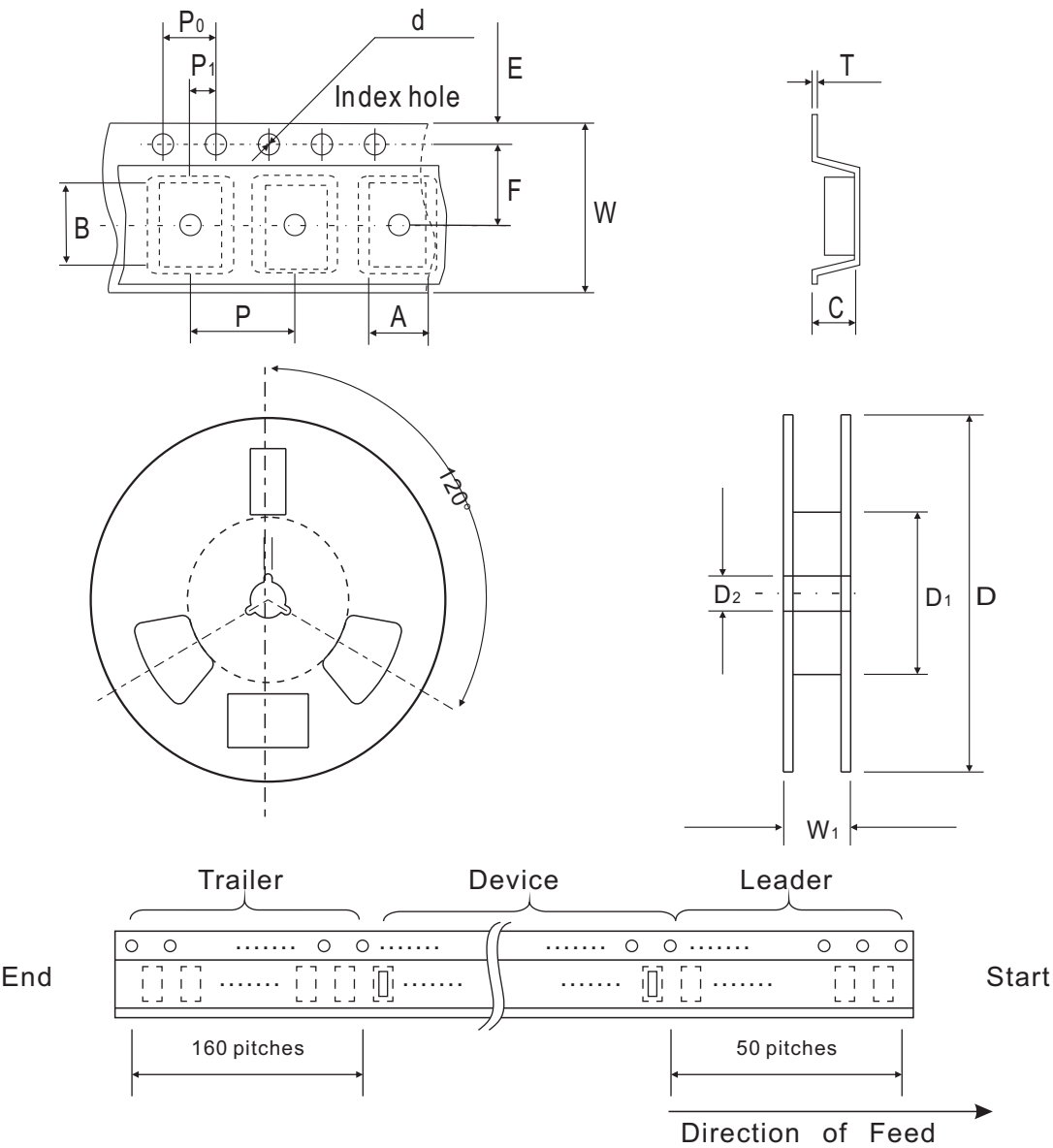


Fig. 3 - Power rating derating curve



Reel Taping Specification



SOT-383F	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.96 ± 0.10	2.31 ± 0.10	0.74 ± 0.10	1.55 ± 0.10	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.077 ± 0.004	0.091 ± 0.004	0.029 ± 0.004	0.061 ± 0.004	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

SOT-383F	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 ± 0.10	0.22 ± 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.

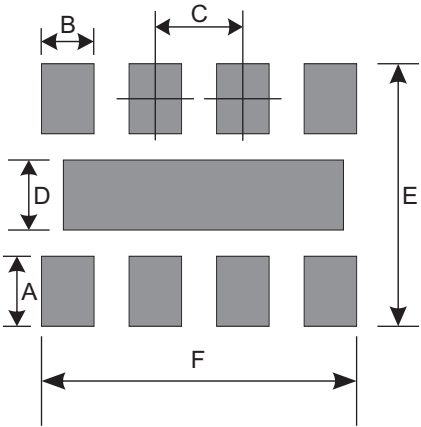
Marking Code

Part Number	Marking Code
CPDVR085V0C-HF	E05



Suggested PAD Layout

SIZE	SOT-383F(VR8)	
	(mm)	(inch)
A	0.630	0.025
B	0.300	0.012
C	0.500	0.020
D	0.450	0.018
E	2.150	0.085
F	1.800	0.071



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
SOT-383F(VR8)	3000	7