



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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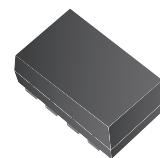
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CPDVR085V0U RoHS Device



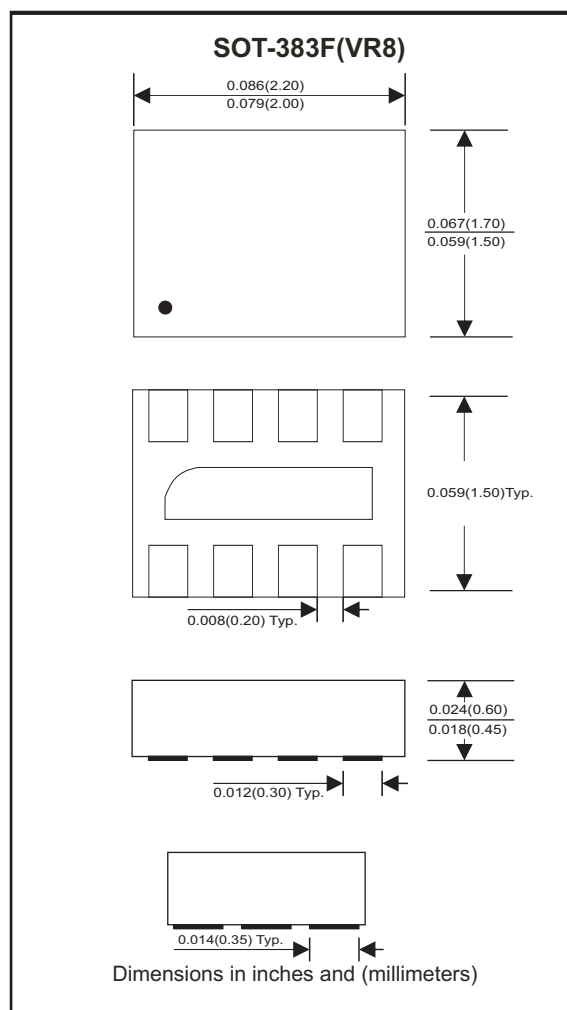
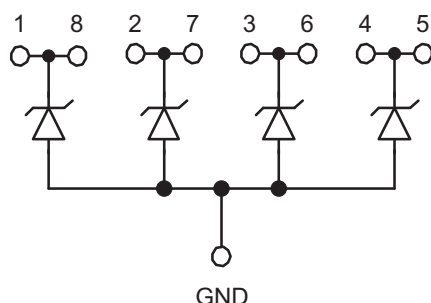
Features

- Common anode ESD protection
- IEC 61000-4-2 8kV(contact), 15kV(air).
- Surface mount package.
- High component density.

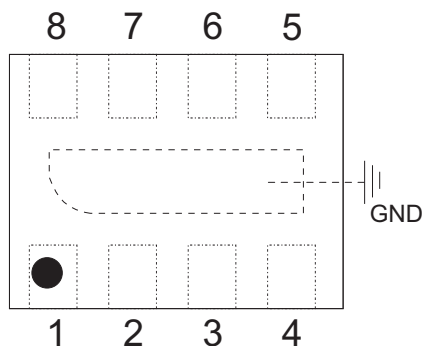
Mechanical data

- Case: SOT-383F Standard package ,
molded plastic.
- Terminals: Nipd, solderable per
MIL-STD-750, method 2026.
- Marking Code: E5U
- Mounting position: Any.

Circuit Diagram



Package



Maximum Rating and Electrical Characteristics

(at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 10mA	VF		0.8		V
Diode breakdown voltage	IR = 1mA	VBD	6			V
Leakage current	VR = 5V	IL		0.3	2.0	uA
Junction capacitance	VR = 0V, f = 1MHz	CT		90	120	pF
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			20 15	kV
Clamping voltage	IPP = 5A, TP=8/20us IPP = 16A, TP=8/20us	Vc			9.8 12.5	V
Peak pulse power		PPP			200	W
Operation temperature		TJ			125	°C
Storage temperature		TSTG	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDVR085V0U)

Fig. 1 - 8/20us Peak pulse current wave form acc. IEC 61000-4-5

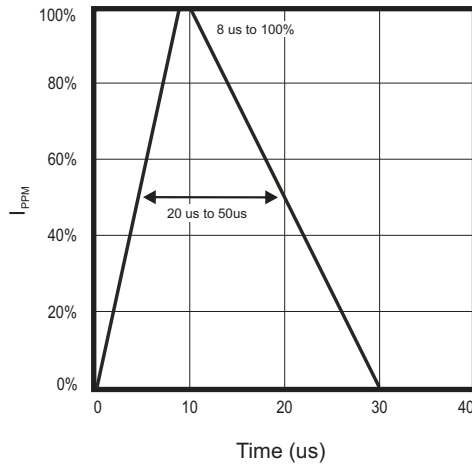


Fig. 2 - Power rating derating curve

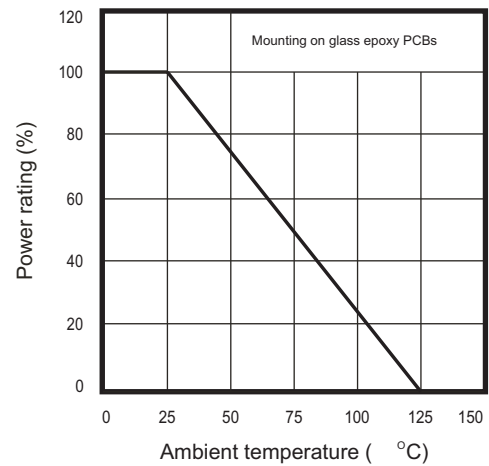


Fig. 3 - Clamping voltage vs. peak pulse current

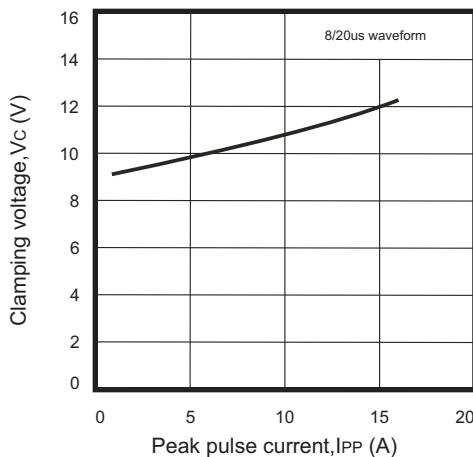


Fig. 4 - Forward voltage vs. forward current

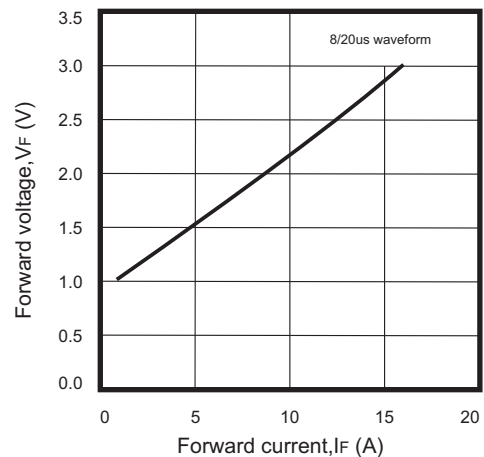
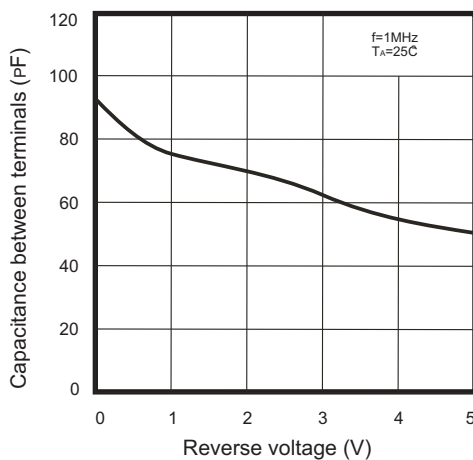
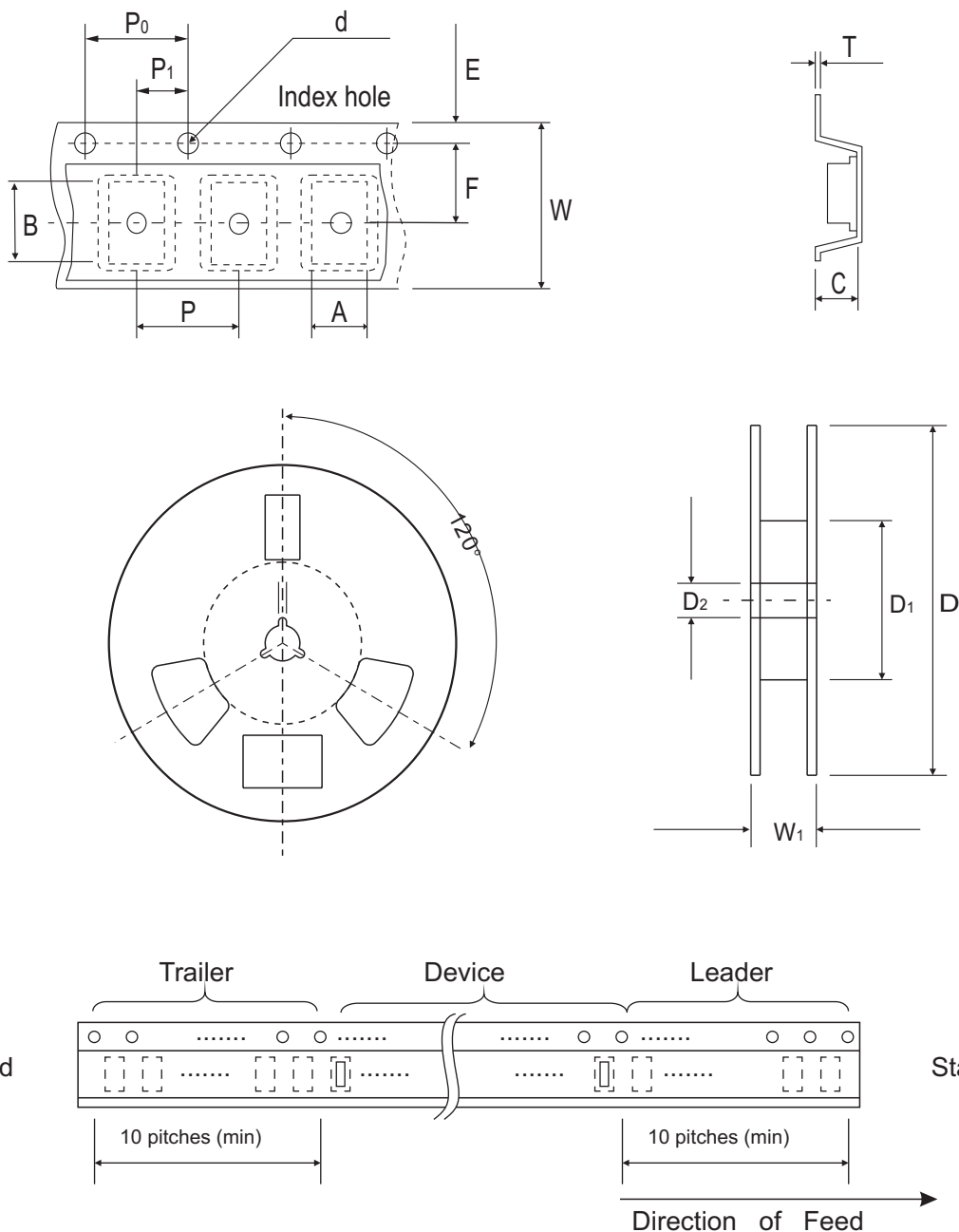


Fig. 5 - Capacitance between terminals characteristics



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.

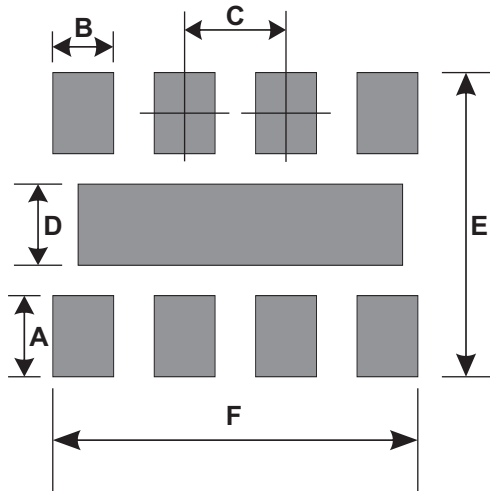
Marking Code

Part Number	Marking Code
CPDVR085V0U	E5U



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 Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-383F (VR8)	3,000	7