

■ Features

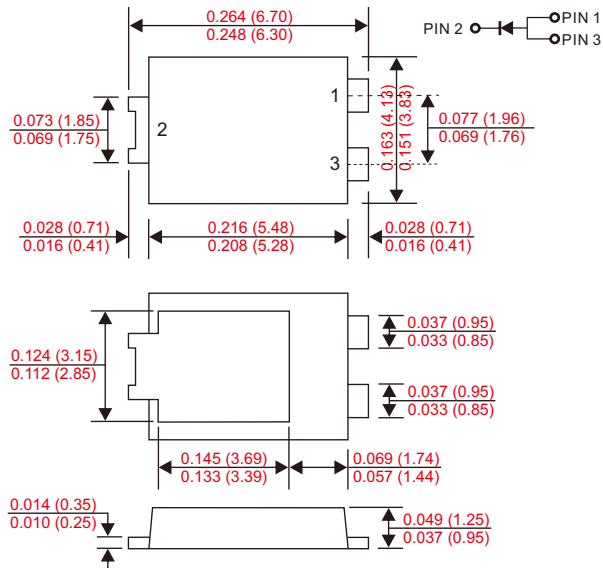
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CP3S100SG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy : UL94-V0 rated flame retardant.
- Case : Molded plastic, TO-277.
- Lead : Solder plated, solderable per MIL-STD-750, Method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position : Any.
- Weight : Approximated 0.093 grams.

■ Outline

TO-277



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

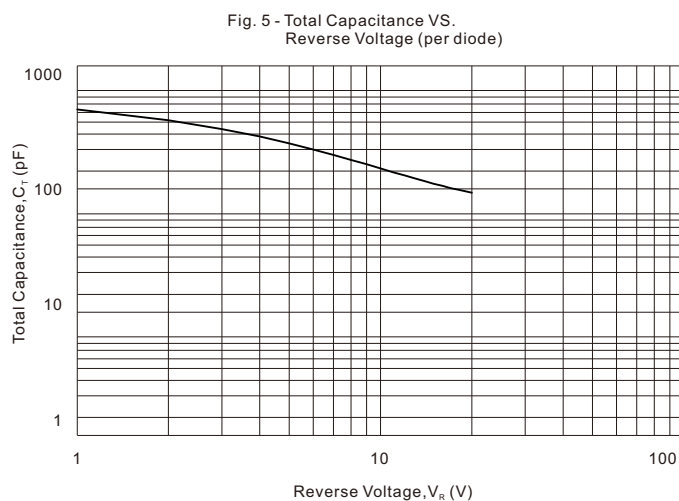
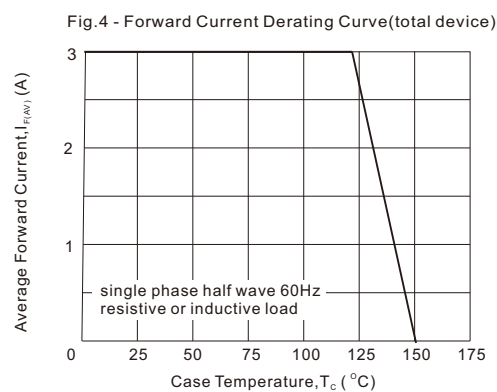
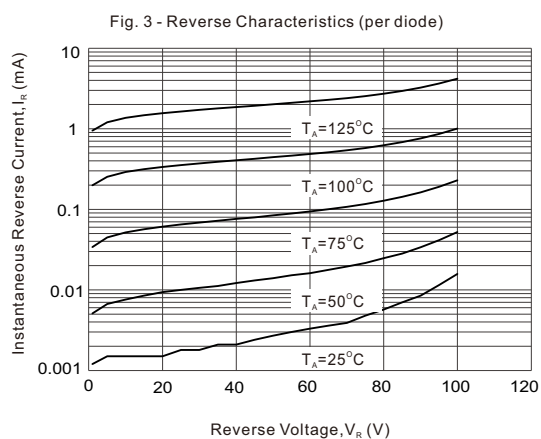
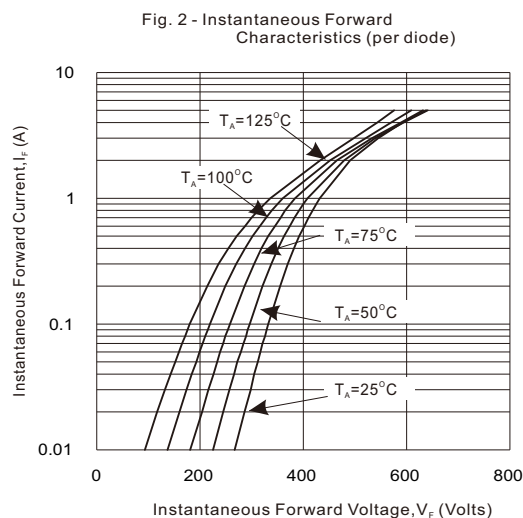
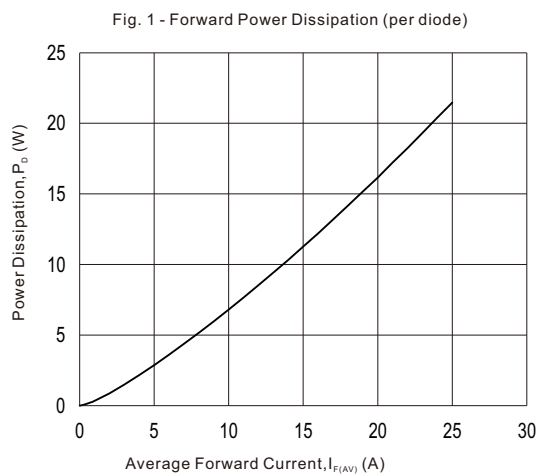
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	CP3S100S	UNIT
Marking code			CP3S100S	
Peak repetitive reverse voltage		V_{RRM}		
Working peak reverse voltage		V_{RWM}	100	V
DC blocking voltage		V_{RM}		
Forward rectified current		I_O	3	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	100	A
Operating and Storage temperature		T_J, T_{STG}	-55 ~ +150	°C
Thermal Resistance	Junction to Case	R_{BJC}	4	°C/W

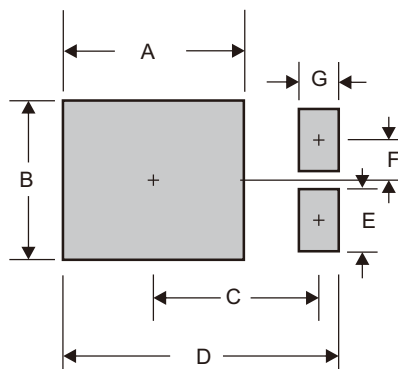
Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 3A, T_J = 25^\circ C$	V_F		550	620	mV
	$I_F = 3A, T_J = 125^\circ C$			500		
Reverse current	$V_R = 100V, T_J = 25^\circ C$	I_R		20	100	μA
	$V_R = 100V, T_J = 125^\circ C$			5	20	

Note : 1.FR-4 PCB, 2oz.Copper.
2.Polyimide PCB, 2oz.Copper.Cathode pad dimensions 18.8mm x 14.4mm.Anode pad dimensions 5.6mm x 14.4mm.

■ Rating and characteristic curves



■ TO-277 foot print



A	B	C	D	E	F	G
0.185 (4.70)	0.142 (3.60)	0.152 (3.87)	0.260 (6.60)	0.055 (1.40)	0.035 (0.90)	0.031 (0.80)

Dimensions in inches and (millimeters)

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