

Chip Integration Technology Corporation

Super Low Barrier High Voltage Power Rectifier

Main Product Characteristics

I _{F(AV)}	5A
V _{RRM}	60V
T _J	150°C
$V_{(Typ)}$	0.45V

■ Features

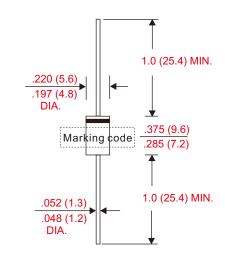
- Axial lead type devices for through hole design.
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex.CSRS560G-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- · Case: Molded plastic, DO-201AD / DO-27
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity: Color band denotes cathode end
- Weight : Approximated 1.10 gram
- Maximum ratings and electrical characteristics

Outline

DO-27(DO-201AD)



Dimensions in inches and (millimeters)

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 CSRS560-A

Parameter	Conditions	Symbol	rmbol CSRS560-A CSRS560	
Marking code				
Peak repetitive reverse voltage		V _{RRM}		
Working peak reverse voltage		V _{RWM}	60	V
DC blocking voltage		V _{RM}		
Forward rectified current		Io	5	Α
Peak repetitive reverse surge current	2us - 1kHz	I _{RRM}	2	А
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	200	А
Thermal resistance	Junction to case	R _{eJC}	20	°C/W
Operating and Storage temperature		T_J, T_{STG}	-55 ~ +150	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 5A, T_J = 25^{\circ}C$	V			480	mV
	I _F = 5A, T _J = 125°C	V _F			420	
I Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}C$				0.5	mA
	$V_R = V_{RRM} T_J = 125^{\circ}C$	I _R			100	

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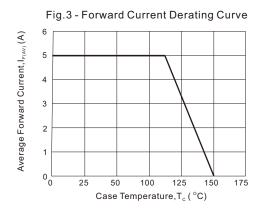
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■ Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics 100 Instantaneous Forward Current (A) T_A=150°C 10 T_A=125°C T_A=100°C T_A=85°C =25°C 0.01 0.2 0.8 0.4 0.6 1.0 Instantaneous Forward Voltage (Volts)

Fig. 2 - Reverse Characteristics 100 Instantaneous Reverse Current (mA) T_A=150°C 10 T_A=125°C T_A=100°C T_A=85°C T_A=50°C T_=25°C 0.01 10 20 30 50 Reverse Voltage (V)



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http://www.citcorp.com.tw/

Tel:886-3-5600628

Fax:886-3-5600636

Add:Rm. 3, 2F., No.32, Taiyuan St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)

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