

## **5A Lead Type Low Barrier Diode**

#### ■ Features

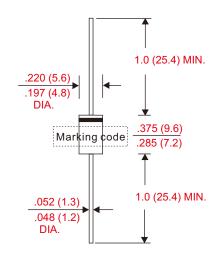
- Axial lead type devices for through hole design.
- Low forward voltage drop.
- Excellent high temperature stability.
- · Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex.CRS545G
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

#### ■ 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

#### ■ Outline

DO-27(DO-201AD)



Dimensions in inches and (millimeters)

### ■ Maximum ratings and electrical characteristics

Rating at  $25^{\circ}$ 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	CRS545	LINUT	
Marking code			CRS545	UNIT	
Peak repetitive reverse voltage		V <sub>RRM</sub>			
Working peak reverse voltage		V <sub>RWM</sub>	45	V	
DC blocking voltage		V <sub>RM</sub>			
Forward rectified current		Io	5	Α	
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>	120	Α	
Peak repetitive reverse surge current	2us - 1kHz	I <sub>RRM</sub>	2	А	
Thermal resistance	Junction to case	R <sub>eJC</sub>	22	°C/W	
Operating and Storage temperature		T <sub>J</sub> , T <sub>STG</sub>	-65 ~ +150	°C	

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 2A, T_J = 25^{\circ}C$			340		mV
	$I_F = 5A, T_J = 25^{\circ}C$	V <sub>F</sub>		390	440	
	$I_F = 5A, T_J = 125^{\circ}C$				380	
Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}C$				0.5	mA
	$V_R = V_{RRM} T_J = 125^{\circ}C$	I <sub>R</sub>			100	

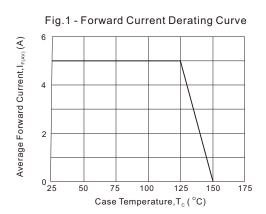
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# ■ Rating and characteristic curves



100

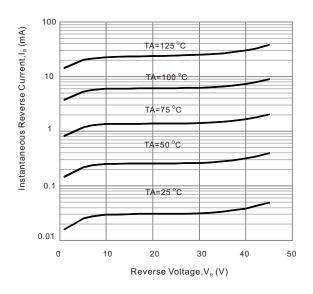
TA=125°C

TA=50°C

TA=25°C

Fig. 2 - Instantaneous Forward Characteristics

Fig. 3 - Reverse Characteristics



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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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