

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

### ■ Features

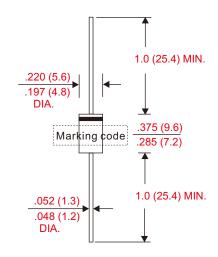
- Axial lead type devices for through hole design.
- Low forward voltage drop.
- Excellent high temperature stability.
- · Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex.CSRL545G-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ 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

#### ■ 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	CSRL545-A	LINIT	
Marking code			CSRL545	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	А	
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>	150	А	
Peak repetitive reverse surge current	2us - 1kHz	I <sub>RRM</sub>	2	А	
Thermal resistance	Junction to case	R <sub>eJC</sub>	20	°C/W	
Operating and Storage temperature		T <sub>J</sub> , T <sub>stg</sub>	-65 ~ +150	°C	

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
I Forward voltage drop	$I_{F} = 5A, T_{J} = 25^{\circ}C$	V <sub>F</sub>			470	mV
	$I_F = 5A, T_J = 125^{\circ}C$				400	
I Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}C$	- I <sub>R</sub>			0.5	mA
	$V_R = V_{RRM} T_J = 125^{\circ}C$				100	

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# ■ Rating and characteristic curves

Fig. 2 - Instantaneous Forward Characteristics 100 Instantaneous Forward Current, I<sub>F</sub> (A) T<sub>A</sub>=150°C: 10 T<sub>A</sub>=125°C 0.1 0.01 0.2 0.3 0.4 0.5 0.6 0.7 Instantaneous Forward Voltage, V<sub>F</sub> (Volts)

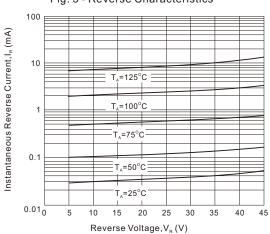


Fig. 3 - Reverse Characteristics

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