

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
www.centralsemi.com

CR5F-010 SERIES

**GLASS PASSIVATED JUNCTION
FAST RECOVERY RECTIFIER
5.0 AMP, 100 THRU 1000 VOLTS**

JEDEC DO-201AD CASE

DESCRIPTION

The Central Semiconductor CR5F Series types are axial lead silicon rectifiers designed for DC power supply and inverter applications where fast recovery times are needed.

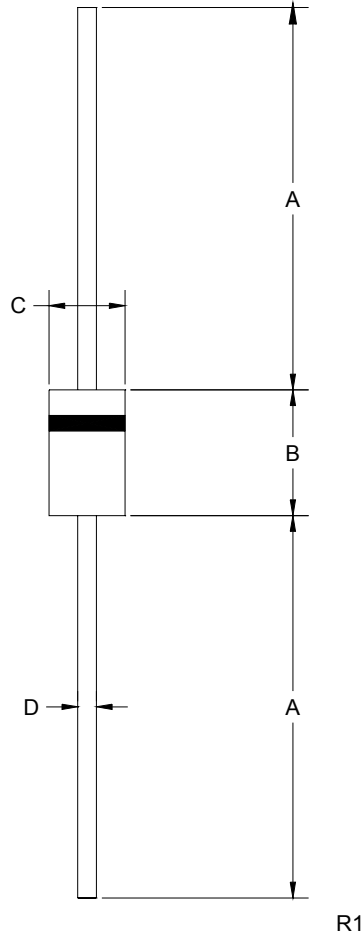
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

	<u>SYMBOL</u>	<u>CR5F</u> <u>-010</u>	<u>CR5F</u> <u>-020</u>	<u>CR5F</u> <u>-040</u>	<u>CR5F</u> <u>-060</u>	<u>CR5F</u> <u>-080</u>	<u>CR5F</u> <u>-100</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current ($T_A=55^\circ\text{C}$)	I_O				5.0			A
Peak Forward Surge Current	I_{FSM}				125			A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +150				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I_R	$V_R=\text{Rated } V_{RRM}$			5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$			100	μA
V_F	$I_F=5.0\text{A}$			1.3	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A (100V thru 400V)}$			150	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A (600V)}$			250	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A (800V thru 1000V)}$			500	ns

JEDEC 201AD CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.000	-	25.40	-
B	0.283	0.375	7.20	9.53
C	0.189	0.210	4.80	5.33
D	0.047	0.052	1.20	1.32

DO-201AD (REV: R1)

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