

CentralTM Semiconductor Corp.

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 Manufacturer of World Class Discrete Semiconductors
 www.centralsemi.com

CR3F-010 SERIES 3.0 AMP FAST RECOVERY RECTIFIER

JEDEC D0-201AD CASE

DESCRIPTION: The CENTRAL SEMICONDUCTOR CR3F Series types are Axial Lead Silicon Rectifiers designed for DC Power Supply and Inverter applications where fast recovery times are needed.

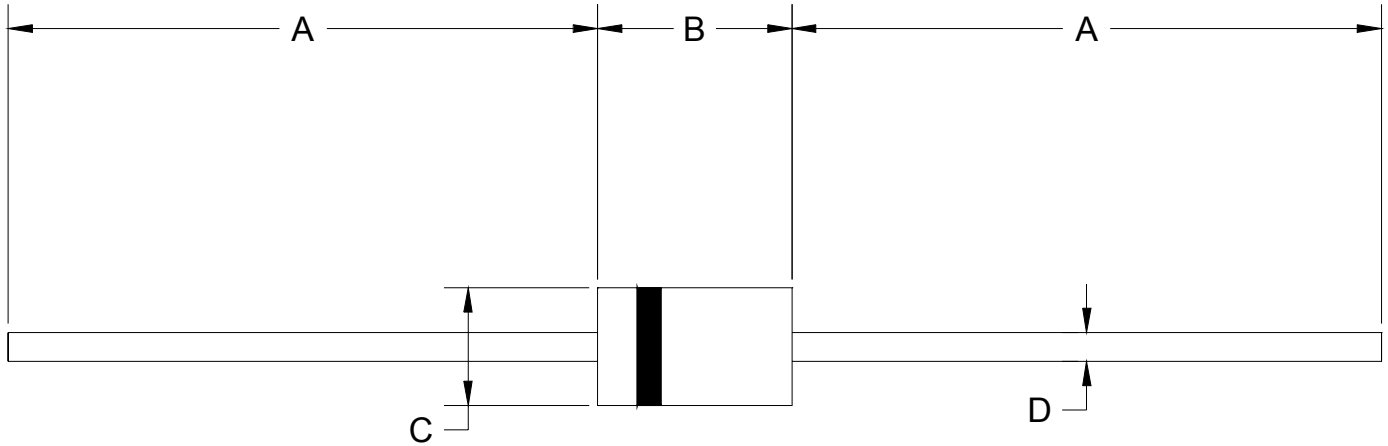
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	CR3F- 010	CR3F- 020	CR3F- 040	CR3F- 060	CR3F- 080	CR3F- 100	UNITS
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 ($T_A=90^{\circ}\text{C}$)	I_O				3.0			A
Peak Forward Surge Current (8.3ms)	I_{FSM}				150			A
Operating Temperature Range	T_J				-55 to +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}				-55 to +150			$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}				15			$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}, T_C=25^{\circ}\text{C}$		5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=100^{\circ}\text{C}$		100	μA
V_F	$I_F=3.0\text{A}$		1.2	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-010, -020, -040)		150	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-060)		250	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-080, -100)		500	ns
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CR3F-010, -020, -040)	65		pF
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CR3F-060, -080, -100)	40		pF

(SEE REVERSE SIDE)

JEDEC DO-201AD CASE - MECHANICAL OUTLINE

DIMENSIONS				
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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