

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CR2F-010 SERIES

FAST RECOVERY RECTIFIER
2.0 AMP, 100 THRU 1200 VOLTS

JEDEC DO-15 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CR2F-010 series types are Axial Lead Epoxy Silicon Rectifiers designed for DC Power Supply and Inverter applications where fast recovery times are needed.

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

	SYMBOL	CR2F -010	CR2F -020	CR2F -040	CR2F -060	CR2F -080	CR2F -100	CR2F -120	UNITS
Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	1200	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	1200	V
RMS Voltage	V_{RMS}	75	140	280	420	560	700	840	V
Average Forward Current ($T_A = 50^\circ\text{C}$)	I_O				2.0				A
Peak Forward Surge Current ($T_J = 150^\circ\text{C}$) (8.3ms single half sine-wave on rated load)	I_{FSM}				50				A
Storage Temperature	T_{stg}				-65 to +175				$^\circ\text{C}$
Junction Temperature	T_J				-65 to +150				$^\circ\text{C}$
Thermal Resistance	θ_{JA}				50 TYP.				$^\circ\text{C}/\text{W}$

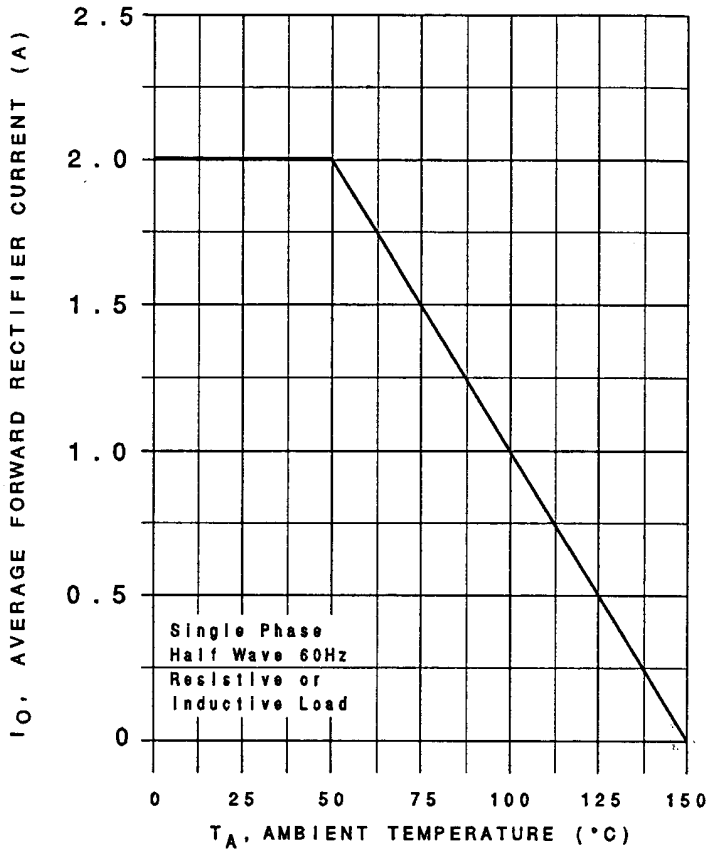
ELECTRICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
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	$I_F = 2.0\text{A}$			1.3	V
C_J	$V_R = 4.0\text{V}, f = 1.0 \text{ MHz (CR2F-010 TO CR2F-040)}$		20		pF
C_J	$V_R = 4.0\text{V}, f = 1.0 \text{ MHz (CR2F-060 TO CR2F-120)}$		10		pF
t_{rr}	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recovery to } 0.25\text{A (CR2F-010 TO CR2F-040)}$			150	ns
t_{rr}	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recovery to } 0.25\text{A (CR2F-060)}$			250	ns
t_{rr}	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recovery to } 0.25\text{A (CR2F-080 TO CR2F-120)}$			500	ns

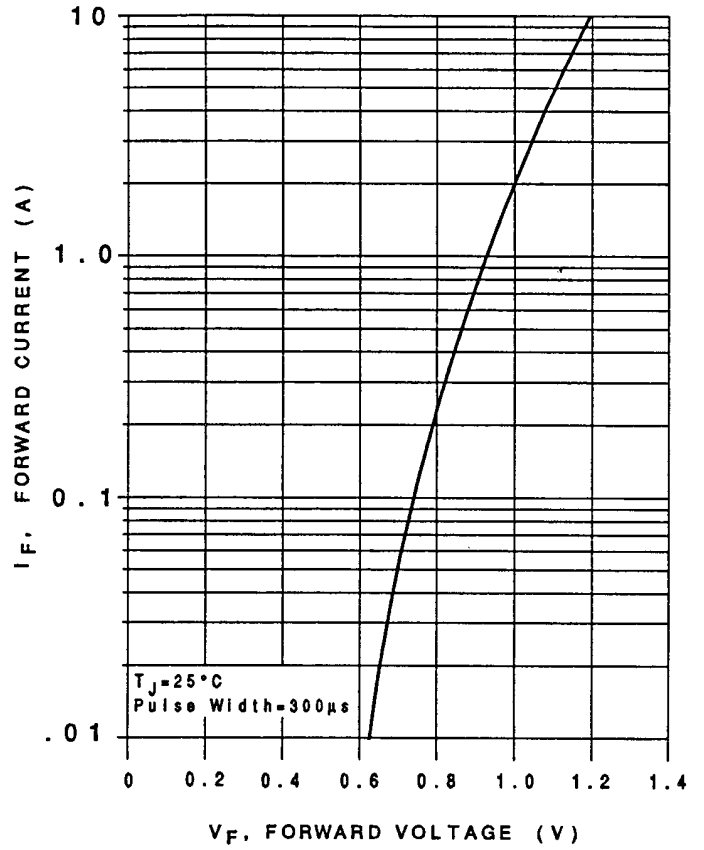
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CR2F-010 SERIES RATING AND CHARACTERISTIC CURVES

FORWARD DERATING CURVE



TYPICAL FORWARD CHARACTERISTICS



MECHANICAL OUTLINE

ALL DIMENSIONS
IN INCHES (mm).

