

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.				$^\circ\text{C/W}$

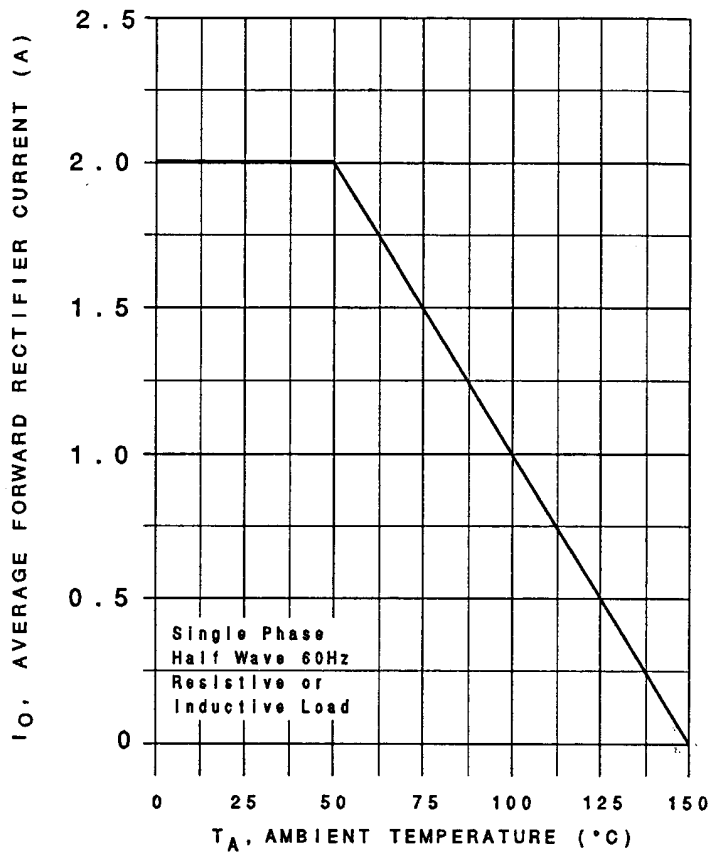
ELECTRICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$ unless otherwise noted)

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

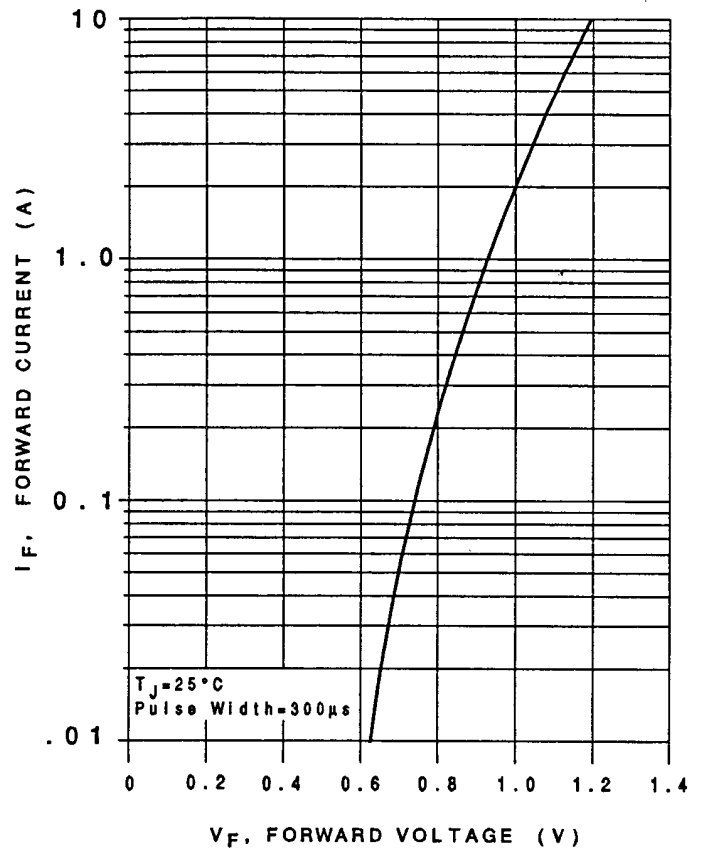
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CR2F-010 SERIES RATING AND CHARACTERISTIC CURVES

FORWARD DERATING CURVE

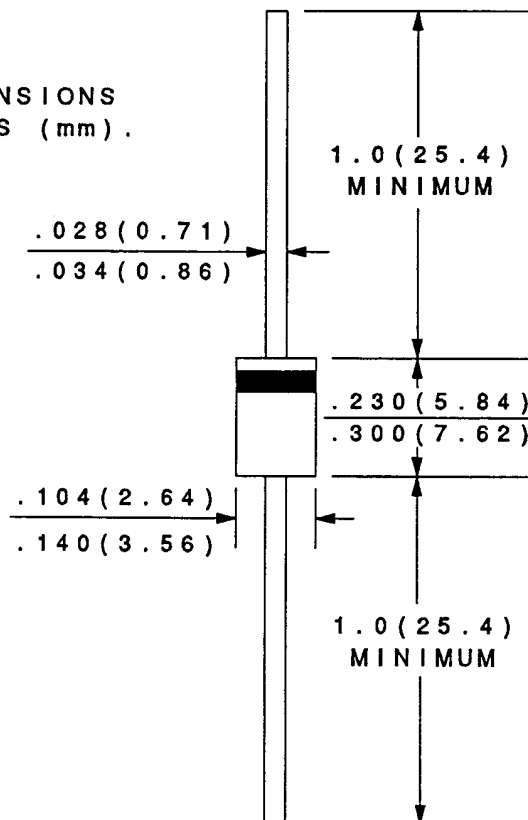


TYPICAL FORWARD CHARACTERISTICS



MECHANICAL OUTLINE

ALL DIMENSIONS
IN INCHES (mm).



OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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