

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CR3U-010 SERIES

ULTRA FAST RECOVERY RECTIFIER
3.0 AMP, 100 THRU 1000 VOLTS

JEDEC DO-201AD CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CR3U-010 Series types are 3.0 Amp Silicon Ultra Fast Recovery Rectifiers manufactured using the epitaxial process designed for those applications requiring extremely fast recovery times.

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

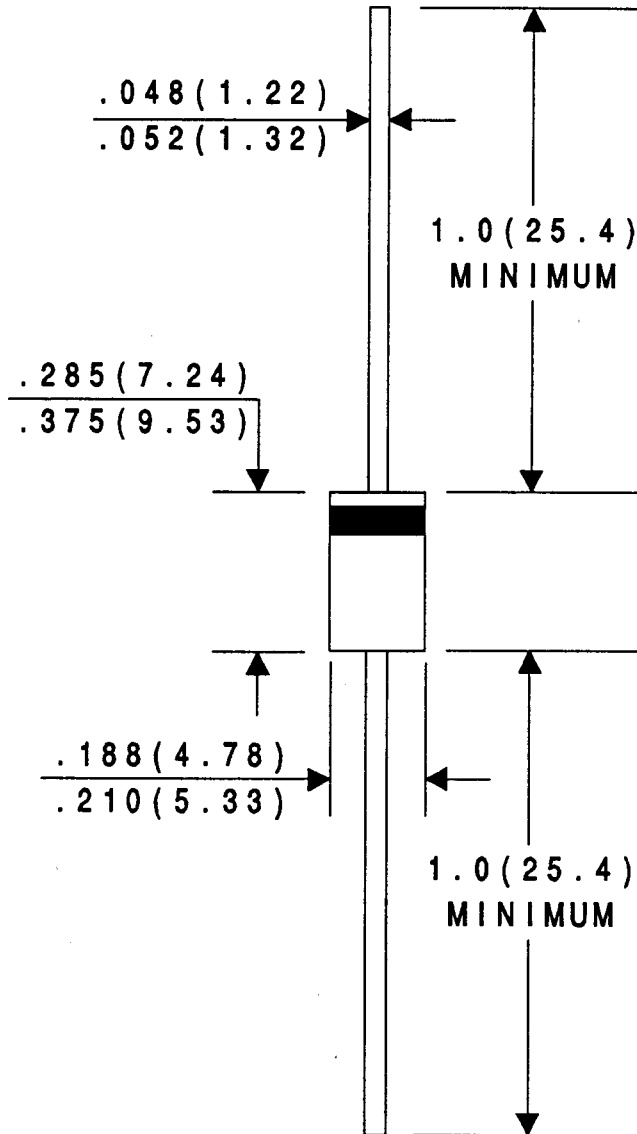
	<u>SYMBOL</u>	<u>CR3U -010</u>	<u>CR3U -020</u>	<u>CR3U -040</u>	<u>CR3U -060</u>	<u>CR3U -080</u>	<u>CR3U -100</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current ($T_A=55^\circ\text{C}$)	I_O				3.0			A
Peak Forward Surge Current	I_{FSM}				150			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	$V_R=\text{Rated } V_{RRM}$			10	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$			100	μA
V_F	$I_F=3.0\text{A}$ (CR3U-010 & CR3U-020)			1.0	V
V_F	$I_F=3.0\text{A}$ (CR3U-040)			1.3	V
V_F	$I_F=3.0\text{A}$ (CR3U-060 THRU CR3U-100)			1.7	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CR3U-010 THRU CR3U-040)			50	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CR3U-060 THRU CR3U-100)			75	ns

(SEE REVERSE FOR MECHANICAL OUTLINE)

JEDEC DO-201AD CASE - 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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