

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)

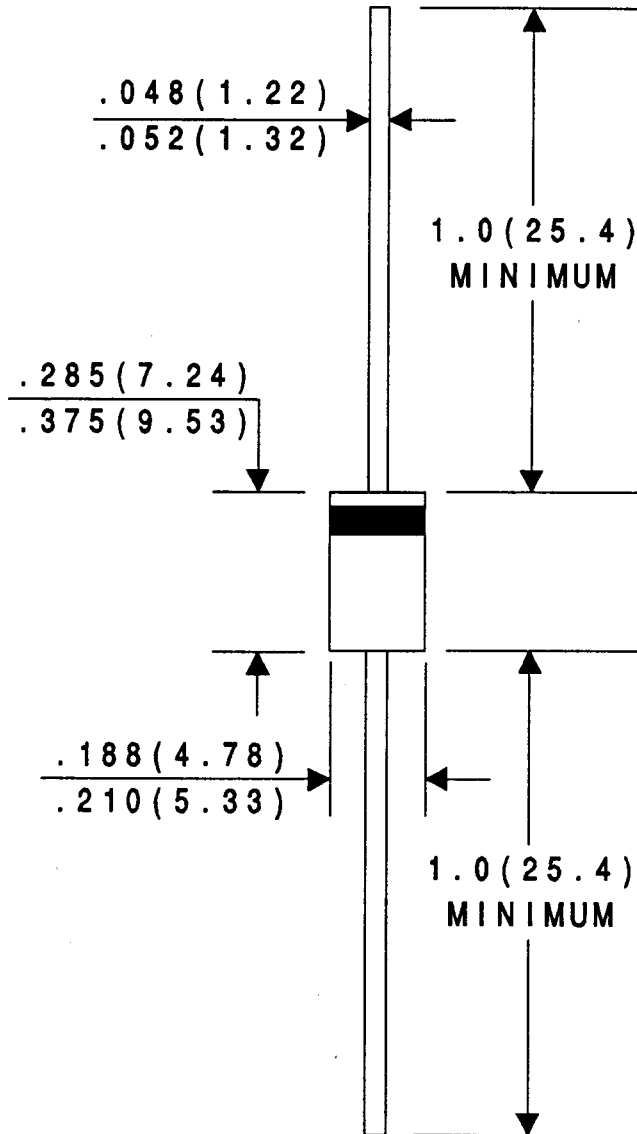
	SYMBOL	CR3U -010	CR3U -020	CR3U -040	CR3U -060	CR3U -080	CR3U -100	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current ($T_A=55^\circ\text{C}$)	I_O				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)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R =Rated V_{RRM}			10	μA
I_R	V_R =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).