

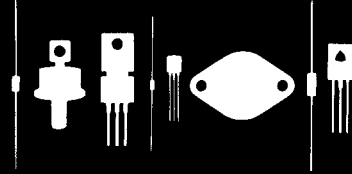
Central
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145 Adams Avenue
Hauppauge, New York 11788



CR1U SERIES

1.0 AMP, 50 THRU 1000 VOLTS
ULTRA FAST SILICON RECTIFIER

JEDEC D0-41 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CR1U series types are silicon ultra fast recovery rectifiers manufactured using the epitaxial process with glass passivated (hermetically sealed) chips designed for applications requiring extremely fast reverse recovery times.

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

	SYMBOL	CR1U -005	CR1U -010	CR1U -020	CR1U -040	CR1U -060	CR1U -080	CR1U -100	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	140	280	420	560	700	V
Average Forward Current ($T_A=70^\circ\text{C}$)	I_O				1.0				A
Peak Forward Surge Current	I_{FSM}				50				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	UNIT
I_R	$V_R=\text{Rated } V_{RRM}$			5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_L=60^\circ\text{C}$			100	μA
V_F	$I_F=\text{Rated } I_O$ (50V thru 400V)		0.85	1.0	V
V_F	$I_F=\text{Rated } I_O$ (600V thru 1000V)		1.4	1.75	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}$ Recov to 0.25A			50	ns

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