

CMR1U-01
CMR1U-02
CMR1U-04
CMR1U-06
CMR1U-10
ULTRA FAST RECOVERY RECTIFIER
1.0 AMP, 100 THRU 1000 VOLTS



CentralTM Semiconductor Corp.

FEATURES:

- LOW COST
- SPECIAL SELECTIONS AVAILABLE
- HIGH RELIABILITY
- SUPERIOR LOT TO LOT CONSISTENCY
- GLASS PASSIVATED CHIP
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1.0 Amp Surface Mount Silicon Ultra Fast Recovery Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 12mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

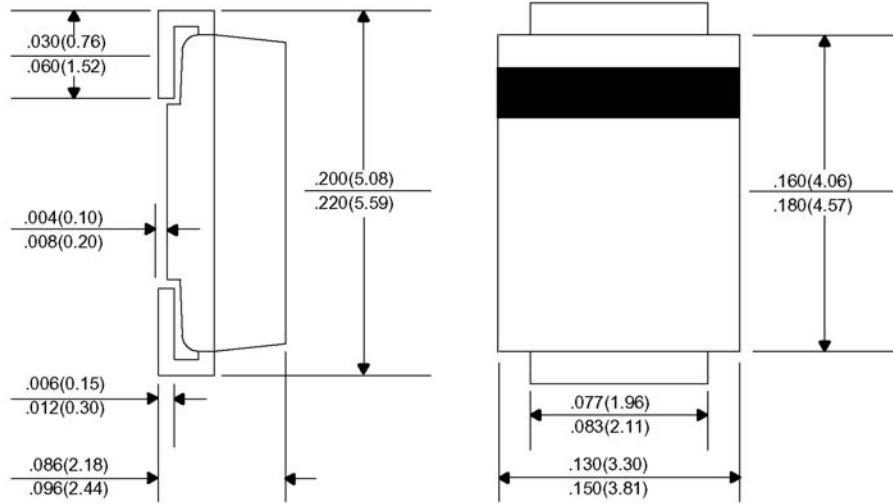
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	CMR1U <u>-01</u>	CMR1U <u>-02</u>	CMR1U <u>-04</u>	CMR1U <u>-06</u>	CMR1U <u>-10</u>	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	1000	V
DC Blocking Voltage	V_R	100	200	400	600	1000	V
RMS Reverse Voltage	$V_R(\text{RMS})$	70	140	280	420	700	V
Average Forward Current ($T_A=75^{\circ}\text{C}$)	I_O			1.0			A
Peak Forward Surge Current (8.3ms)	I_{FSM}			30			A
Operating and Storage							
Junction Temperature	T_J, T_{stg}			-65 to +175			$^{\circ}\text{C}$
Thermal Resistance	θ_{JL}			20			$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$		100	μA
V_F	$I_F=1.0\text{A}, (\text{CMR1U-01, CMR1U-02})$		1.00	V
V_F	$I_F=1.0\text{A}, (\text{CMR1U-04})$		1.25	V
V_F	$I_F=1.0\text{A}, (\text{CMR1U-06})$		1.40	V
V_F	$I_F=1.0\text{A}, (\text{CMR1U-10})$		1.70	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-01, -02, -04})$		50	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-06, -10})$		100	ns

All dimensions in inches (mm).



Marking Codes:

DEVICE	MARKING CODE
CMR1U-01	CU01
CMR1U-02	CU02
CMR1U-04	CU04
CMR1U-06	CU06
CMR1U-10	CU10