

CMR1U-01  
CMR1U-02  
CMR1U-04  
CMR1U-06

ULTRA FAST RECOVERY RECTIFIER  
1.0 AMP, 100 THRU 600 VOLTS



SMB CASE

**Central**<sup>TM</sup>  
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.

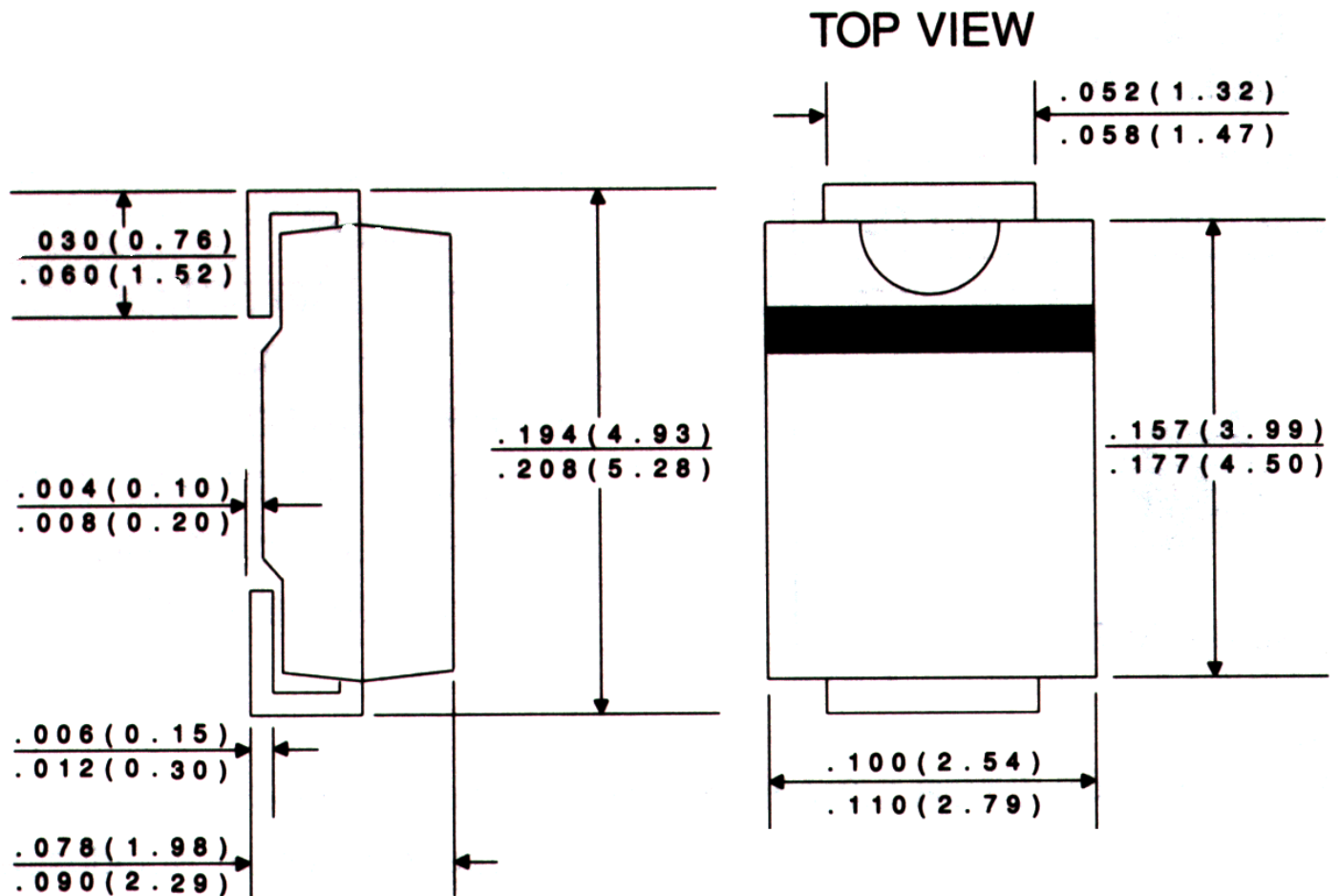
**MAXIMUM RATINGS:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

	SYMBOL	CMR1U -01	CMR1U -02	CMR1U -04	CMR1U -06	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	400	600	V
DC Blocking Voltage	$V_R$	100	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	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	$\Theta_{JL}$		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	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$		100	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}, (\text{CMR1U-01, CMR1U-02})$		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
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-01, -02, -04})$		50	ns
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-06})$		100	ns

All dimensions in inches (mm).



### Marking Codes:

DEVICE	MARKING CODE
CMR1U-01M	CU01M
CMR1U-02M	CU02M
CMR1U-04M	CU04M
CMR1U-06M	CU06M