

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 3.0 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 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

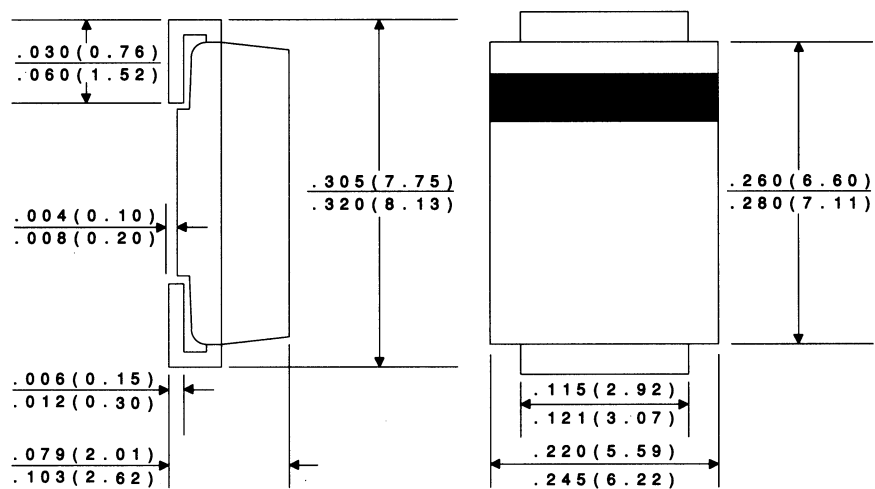
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	CMR3U-01	CMR3U-02	CMR3U-04	CMR3U-06	CMR3U-10	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	$V_{R(RMS)}$	70	140	280	420	700	V
Average Forward Current ($T_A=75^{\circ}\text{C}$)	I_O			3.0			A
Peak Forward Surge Current (8.3ms)	I_{FSM}			150			A
Operating and Storage							
Junction Temperature	T_J, T_{stg}		-65 to +175				$^{\circ}\text{C}$
Thermal Resistance	θ_{JL}			10			$^{\circ}\text{C/W}$

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	$V_R=\text{Rated } V_{RRM}, T_A=100^{\circ}\text{C}$		500	μA
V_F	$I_F=3.0\text{A}, (\text{CMR3U-01, CMR3U-02})$		1.00	V
V_F	$I_F=3.0\text{A}, (\text{CMR3U-04})$		1.25	V
V_F	$I_F=3.0\text{A}, (\text{CMR3U-06})$		1.40	V
V_F	$I_F=3.0\text{A}, (\text{CMR3U-10})$		1.70	V
t_{rr}	$I_F=500\text{mA}, I_R=1.0\text{A}, I_{rr}=250\text{mA} (\text{CMR3U-01, -02, -04})$		50	ns
t_{rr}	$I_F=500\text{mA}, I_R=1.0\text{A}, I_{rr}=250\text{mA} (\text{CMR3U-06, -10})$		100	ns

All dimensions in inches (mm).



Marking Codes:

DEVICE	MARKING CODE
CMR3U-01	CU301
CMR3U-02	CU302
CMR3U-04	CU304
CMR3U-06	CU306
CMR3U-10	CU310

DATA
SHEET

R1