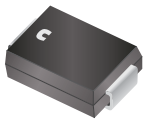
CMR1U-01M CMR1U-06M
CMR1U-02M CMR1U-10M
CMR1U-04M

SURFACE MOUNT SILICON
ULTRA FAST RECOVERY RECTIFIERS
1.0 AMP, 100 THRU 1000 VOLT



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR1U-01M series 1.0 Amp surface mount Ultra Fast Recovery silicon rectifier is a highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where small size is required. The SMA case occupies 30% less board space than the SMB case.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- High reliability
- Glass passivated chip
- Special selections available

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL	CMR1U -01M	CMR1U -02M	CMR1U -04M	CMR1U -06M	CMR1U -10M	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°C)	I_O			1.0			A
Peak Forward Surge Current, tp=8.3ms	I_{FSM}			30			A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +175			°C
Thermal Resistance	θ_{JL}			30			°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	V_R=Rated V_{RRM}		5.0	μA
V_F	I_F=1.0A, (CMR1U-01M, -02M)		1.00	V
V_F	I_F=1.0A, (CMR1U-04M)		1.25	V
V_F	I_F=1.0A, (CMR1U-06M)		1.40	V
V_F	I_F=1.0A, (CMR1U-10M)		1.70	V
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-01M, -02M)		35	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-04M)		50	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-06M)		75	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-10M)		100	ns
t_{fr}	I_F=1.0A, V_{fr}=2.0V	175	250	ns

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