CQ92-2M
CQ92-2N*

TRIAC
2.0 AMP, 600 THRU 800 VOLTS

TO-92 CASE

Central™
Semiconductor Corp.

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CQ92-2M and CQ92-2N are epoxy molded silicon Triacs designed for full wave AC control applications featuring gate triggering in all four (4) quadrants.

MARKING CODE: FULL PART NUMBER

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

	SYMBOL	CQ92-2M	CQ92-2N*	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}	600	800	V
RMS On-State Current (T_C=50°C)	$I_{T(RMS)}$	2.0		A
Peak One Cycle Surge (t=10ms)	I_{TSM}	20		A
I^2t Value for Fusing (t=10ms)	I^2t	2.0		A^2s
Peak Gate Power (tp=10μs)	P_{GM}	3.0		W
Average Gate Power Dissipation	$P_{G\ (AV)}$	0.2		W
Peak Gate Current (tp=10μs)	I_{GM}	1.2		A
Peak Gate Voltage (tp=10μs)	V_{GM}	8.0		V
Storage Temperature	T_{stg}	-40 to +150		°C
Junction Temperature	T_J	-40 to +125		°C
Thermal Resistance	Θ_{JA}	180		°C/W
Thermal Resistance	Θ_{JC}	90		°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}	Rated V_{DRM}, R_{GK}=1KΩ			5.0	μA
I_{DRM}	Rated V_{DRM}, R_{GK}=1KΩ, T_C=125°C			200	μA
I_{GT}	V_D=12V, QUAD I, II, III		1.4	5.0	mA
I_{GT}	V_D=12V, QUAD IV		3.8	8.0	mA
I_H	I_T=100mA, R_{GK}=1KΩ		1.2	5.0	mA
V_{GT}	V_D=12V, QUAD I, II, III, IV		1.1	1.8	V
V_{TM}	I_{TM}=2.0A, tp=380μs		1.50	1.75	V
V_{TM}	I_{TM}=3.0A, tp=380μs		1.7	2.0	V
dv/dt	$V_D=^2/_3\ V_{DRM}$, T_C=125°C	2.5			V/μs

* Available on request. Please consult factory.

R0 (22-April 2004)

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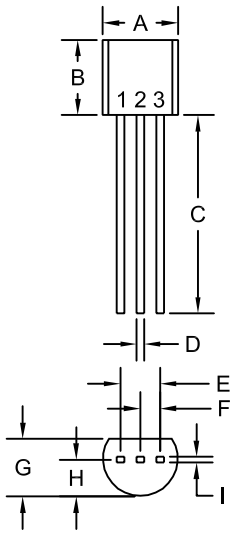
TO-92 CASE - MECHANICAL OUTLINE



R1

LEAD CODE:
1) MT1
2) GATE
3) MT2

MARKING CODE:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

R0 (22-April 2004)