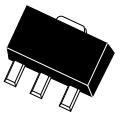
NEW

CQ89DS
CQ89MS
CQ89NS

2.0 AMP TRIAC
400 THRU 800 VOLTS



SOT-89 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQ89DS series types are epoxy molded silicon triacs designed for full wave AC control applications featuring gate triggering in all four (4) quadrants.

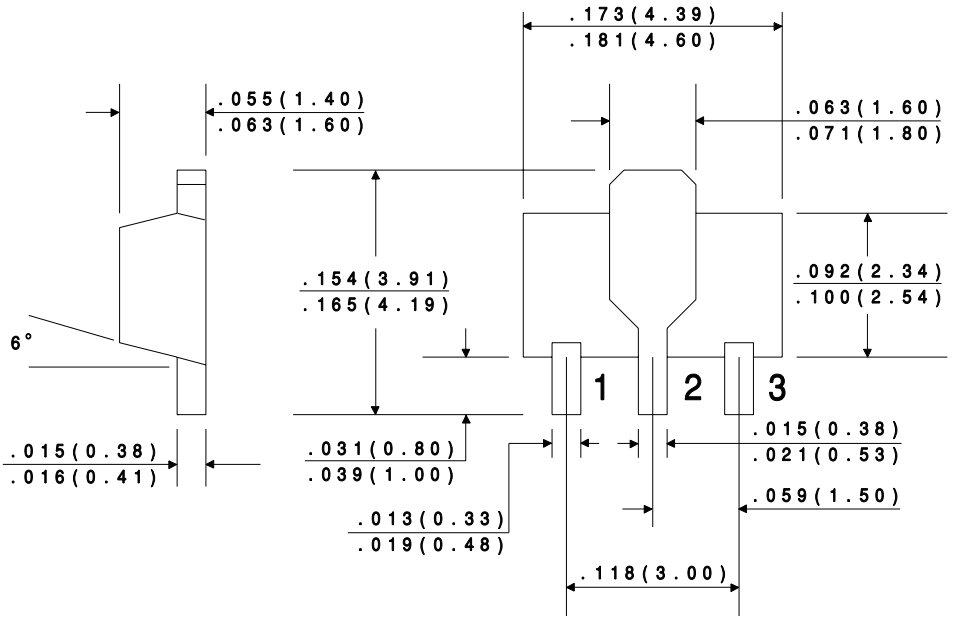
MAXIMUM RATINGS (T_C=25°C)

	SYMBOL	CQ89DS	CQ89MS	CQ89NS	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}	400	600	800	V
RMS On-State Current (T_C=80°C)	$I_{T(RMS)}$		2.0		A
Peak One Cycle Surge (10ms)	I_{TSM}		10		A
Peak Gate Current	I_{GM}		1.0		A
Average Gate Power Dissipation	$P_{G(AV)}$		0.1		W
StorageTemperature	T_{stg}		-45 to +150		°C
Junction Temperature	T_J		-45 to +125		°C
Thermal Resistance	Θ_{J-C}		10		°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}	V_D=Rated V_{DRM}			5.0	μA
I_{DRM}	V_D=Rated V_{DRM}, T_C=125°C			200	μA
I_{GT}	V_D=12V, QUAD I, II, III, IV			5.0	mA
I_H	V_D=12V			5.0	mA
V_{GT}	V_D=12V			2.0	V
V_{TM}	I_T=3.0A			1.75	V
dv/dt	$V_D=\frac{2}{3}V_{DRM}$, T_C=125°C	30			V/μs

All dimensions in inches (mm).



LEAD CODE:

1) GATE
2) MT2
3) MT1

R1