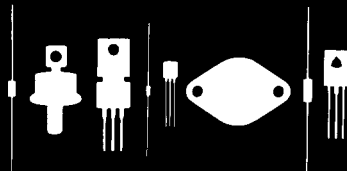


Central
Semiconductor Corp.

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Semiconductor Corp.**

145 Adams Avenue
Hauppauge, New York 11788



CQ3P-25B
CQ3P-25D
CQ3P-25M
CQ3P-25N

ISOLATED 30 AMP TRIAC
200 THRU 800 VOLTS

TO-3P CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CQ3P-25B series types are Epoxy Molded Silicon Triacs mounted on an isolated TO-3 metal platform, designed for full wave AC control applications featuring gate triggering in all four (4) quadrants.

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

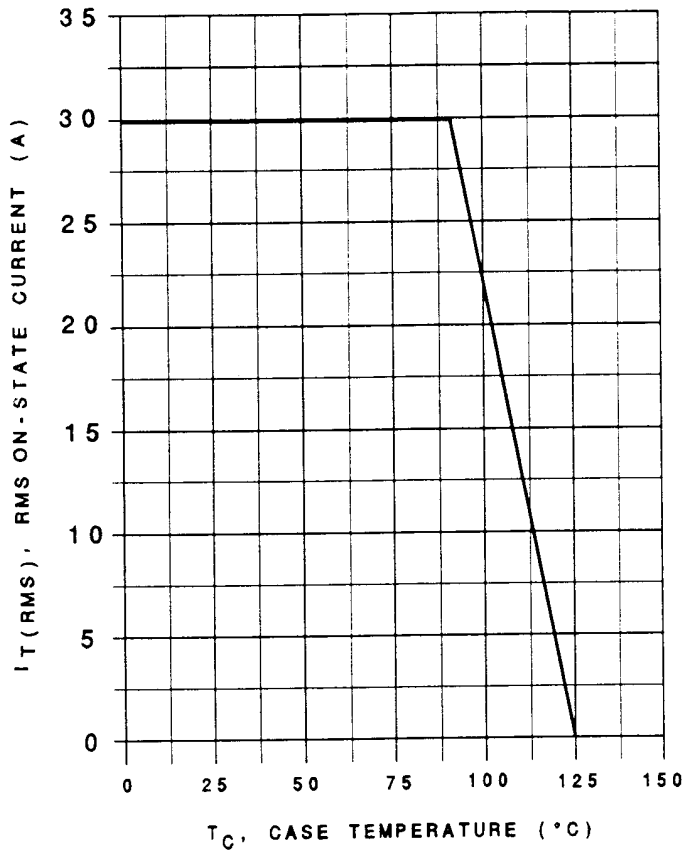
	SYMBOL	CQ3P -25B	CQ3P -25D	CQ3P -25M	CQ3P -25N	UNITS
Peak Repetitive Off-State Voltage	V _{DRM}	200	400	600	800	V
RMS On-State Current (T _C = 90°C)	I _{T(RMS)}			30		A
Peak One Cycle Surge (t = 10ms)	I _{TSM}			250		A
I ² t Value for Fusing (t = 10ms)	I ² t			312.5		A ² s
Peak Gate Power (tp = 10μs)	P _{GM}			40		W
Average Gate Power Dissipation	P _{G(AV)}			1.0		W
Peak Gate Current (tp = 10μs)	I _{GM}			10		A
Peak Gate Voltage (tp = 10μs)	V _{GM}			16		V
Critical Rate of Rise of On-State Current						
Repetitive (F = 50Hz)	di/dt			10		A/μs
Storage Temperature	T _{stg}		-40 to +150			°C
Junction Temperature	T _J		-40 to +125			°C
Thermal Resistance	θ _{J-C}		1.5			°C/W
Isolation Voltage	V _{ISO}		2500			V(RMS)

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

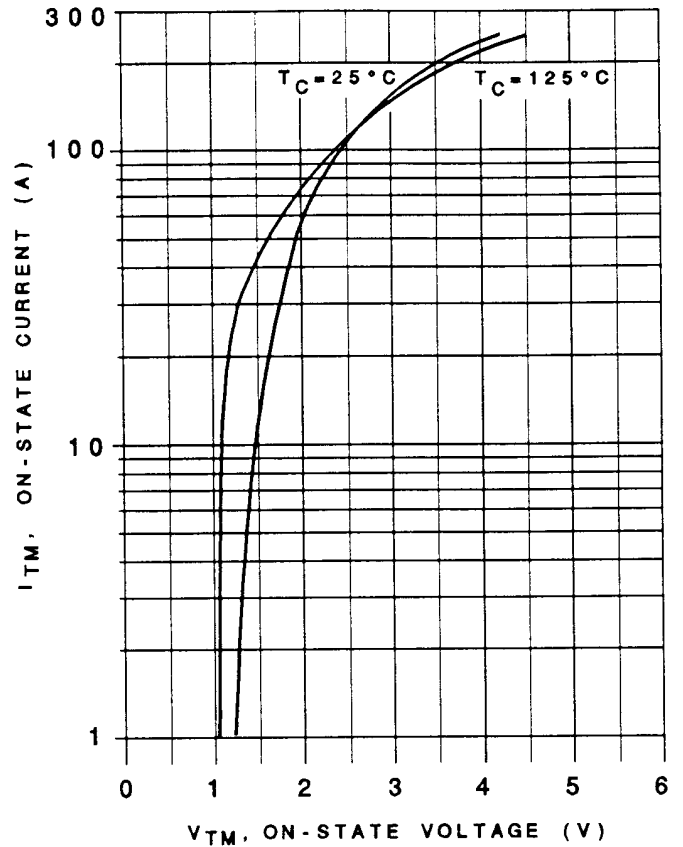
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM}	Rated V _{DRM}			0.01	mA
I _{DRM}	Rated V _{DRM} , T _C = 125°C			6.00	mA
I _{GT}	V _D = 12V, R _L = 33Ω, QUAD I,II,III			50	mA
I _{GT}	V _D = 12V, R _L = 33Ω, QUAD IV			100	mA
I _H	I _T = 500mA			80	mA
V _{GT}	V _D = 12V, R _L = 33Ω, QUAD I,II,III,IV			1.50	V
V _{TM}	I _{TM} = 42A, tp = 10ms			1.80	V
dv/dt	V _D = 2/3 V _{DRM} , R _{GK} = ∞, T _C = 125°C	250			V/μs

CQ3P-25B SERIES RATING AND CHARACTERISTIC CURVES

RMS ON-STATE CURRENT vs. CASE TEMPERATURE



MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE

