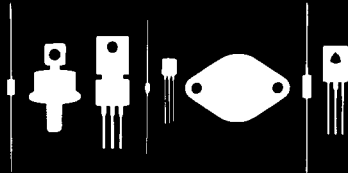


Central
Semiconductor Corp.

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Semiconductor Corp.**

145 Adams Avenue
Hauppauge, New York 11788



CS3P-40B
CS3P-40D
CS3P-40M
CS3P-40N
CS3P-40P
CS3P-40PB

ISOLATED 40 AMP SCR
200 THRU 1200 VOLTS

TO-3P CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CS3P-40B series types are Epoxy Molded Silicon Controlled Rectifiers mounted on an isolated TO-3 metal platform, designed for sensing circuit applications and control systems .

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

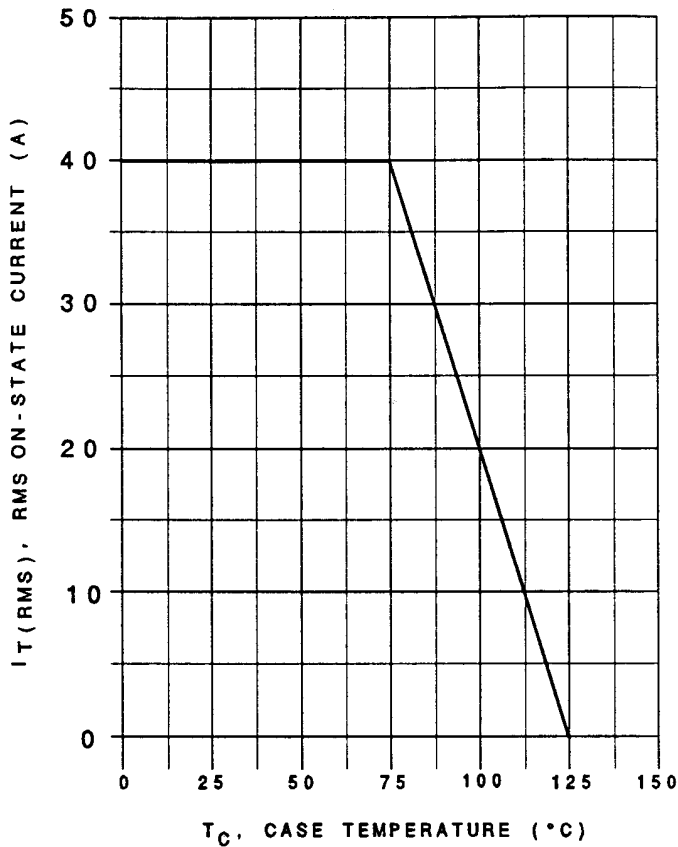
	SYMBOL	CS3P -40B	CS3P -40D	CS3P -40M	CS3P -40N	CS3P -40P	CS3P -40PB	UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _{RRM}	200	400	600	800	1000	1200	V
RMS On-State Current (T _C = 75°C)	I _{T(RMS)}				40			A
Peak One Cycle Surge (t = 10ms)	I _{TSM}				500			A
I ² t Value for Fusing (t = 10ms)	I ² t				1250			A ² s
Peak Gate Power (tp = 10μs)	P _{GM}				50			W
Average Gate Power Dissipation	P _{G(AV)}				1.0			W
Peak Forward Gate Current (tp = 10μs)	I _{FGM}				4.0			A
Peak Forward Gate Voltage (tp = 10μs)	V _{FGM}				16			V
Peak Reverse Gate Voltage (tp = 10μs)	V _{RGM}				5.0			V
Critical Rate of Rise of On-State Current	di/dt				100			A/μs
Storage Temperature	T _{stg}				-40 to +150			°C
Junction Temperature	T _J				-40 to +125			°C
Thermal Resistance	θ _{J-C}				1.0			°C/W
Isolation Voltage	V _{ISO}				2500			V _(RMS)

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

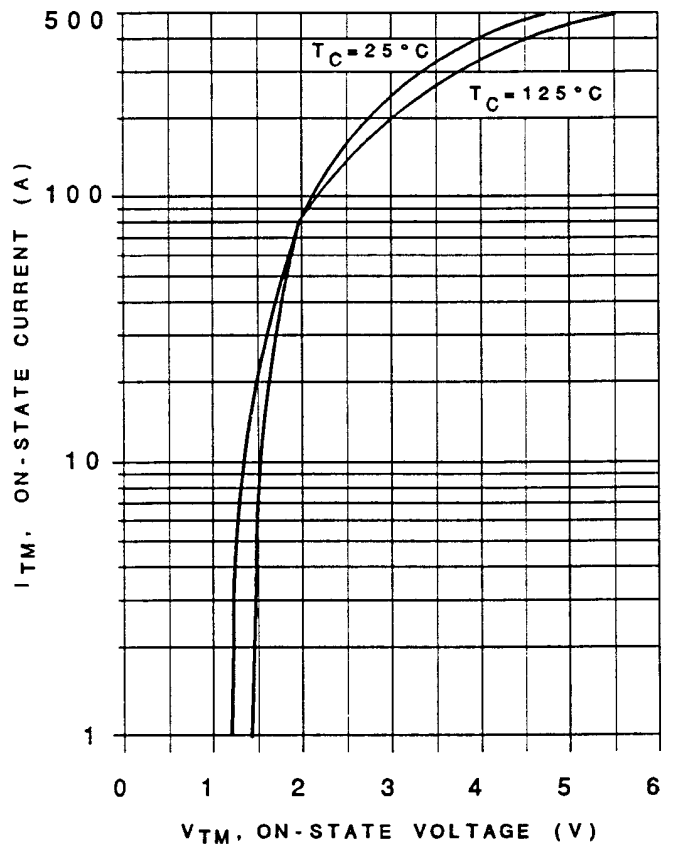
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM} , I _{RRM}	Rated V _{DRM} , V _{RRM}			0.02	mA
I _{DRM} , I _{RRM}	Rated V _{DRM} , V _{RRM} , T _C = 125°C			6.00	mA
I _{GT}	V _D = 12V, R _L = 33Ω			80	mA
I _H	I _T = 500mA			150	mA
V _{GT}	V _D = 12V, R _L = 33Ω			1.50	V
V _{TM}	I _{TM} = 80A, tp = 10ms			2.00	V
dv/dt	V _D = .67 x V _{DRM} , T _C = 125°C, V _{DRM} ≤ 800V	500			V/μs
dv/dt	V _D = .67 x V _{DRM} , T _C = 125°C, V _{DRM} ≥ 1000V	250			V/μs

CS3P-40B SERIES RATING AND CHARACTERISTIC CURVES

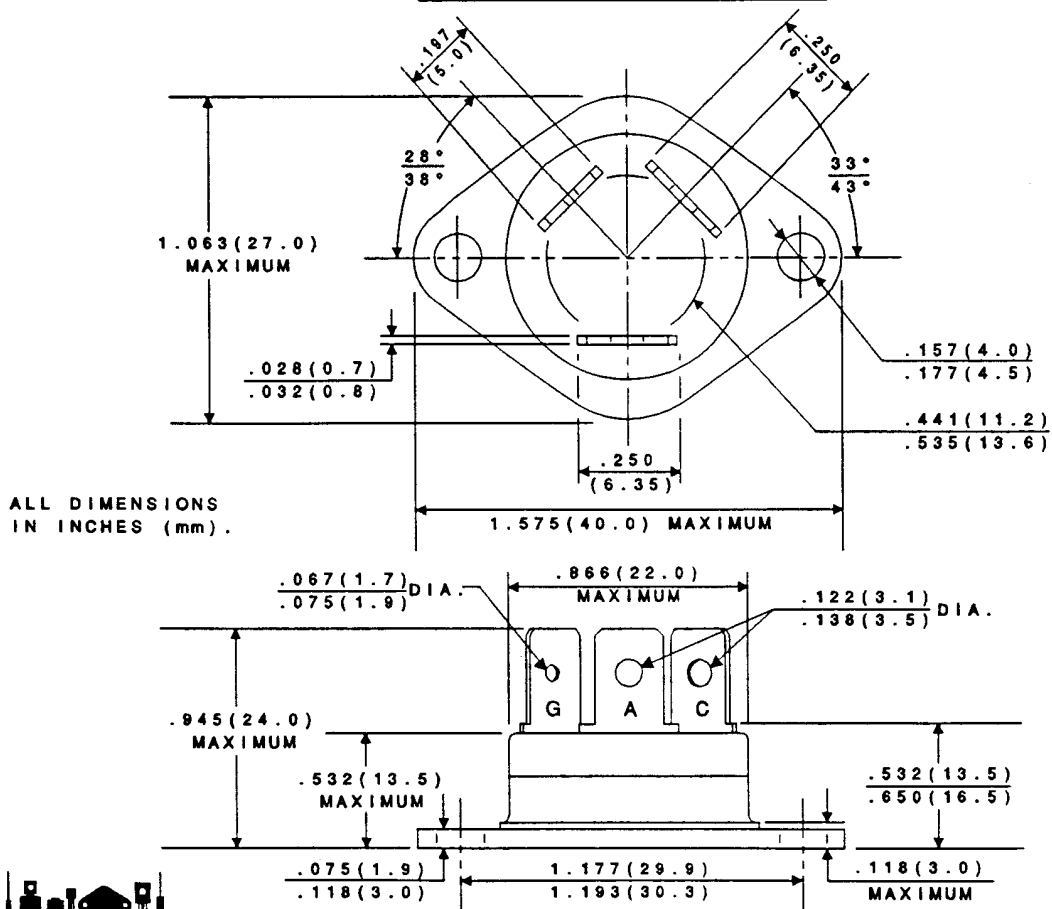
RMS ON-STATE CURRENT vs. CASE TEMPERATURE



MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE



OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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