

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CS92B
CS92D
CS92M

SILICON CONTROLLED RECTIFIER
0.8 AMPS, 200 THRU 600 VOLTS

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CS92B series type are epoxy molded silicon controlled rectifiers designed for control systems and sensing circuit applications.

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

	SYMBOL	CS92B	CS92D	CS92M	UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _R RRM	200	400	600	V
RMS On-State Current (T _C =60°C)	I _T (RMS)		0.8		A
Peak One Cycle Surge (t=10ms)	I _{TSM}	10		A	A
i ² t Value for Fusing (t=10ms)	i ² t		0.24		A ² s
Peak Gate Power (tp=10μs)	P _{GM}		2.0		W
Average Gate Power Dissipation	P _{G(AV)}	0.1		W	W
Peak Gate Current (tp=10μs)	I _{GM}		1.0		A
Peak Gate Voltage (tp=10μs)	V _{GM}		8.0		V
Storage Temperature	T _{stg}	-40 to +125			°C
Junction Temperature	T _J	-40 to +125			°C
Thermal Resistance	Q _{J-A}		200		°C/W
Thermal Resistance	Q _{J-C}		100		°C/W

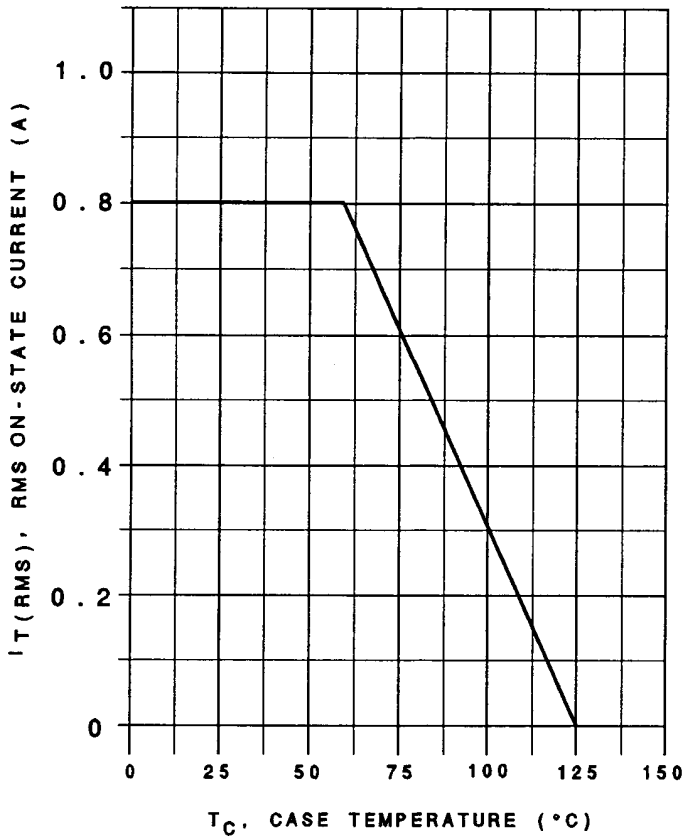
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM} , I _R RRM	Rated V _{DRM} , V _R RRM, R _{GK} =1KΩ			1.00	μA
I _{DRM} , I _R RRM	Rated V _{DRM} , V _R RRM, R _{GK} =1KΩ, T _C =125°C		100		μA
I _{GT}	V _D =12V			200	μA
I _H	R _{GK} =1KΩ			5.00	mA
V _{GT}	V _D =12V			0.8	V
V _{TM}	I _{TM} =1.0A			1.70	V
dv/dt	V _D =.67 x V _{DRM} , R _{GK} =1KΩ, T _C =125°C	25			V/μs

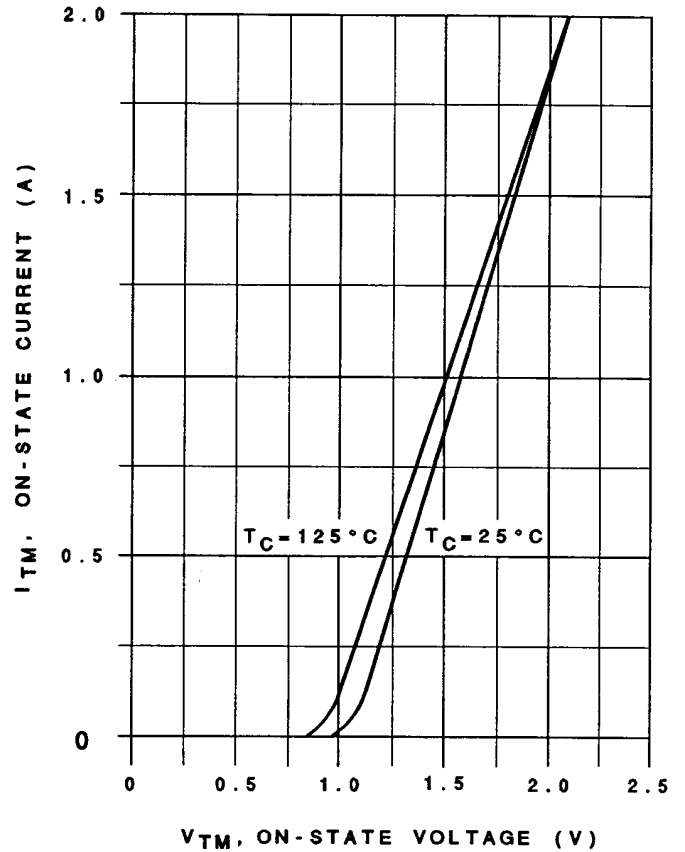
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CS92B SERIES RATING AND CHARACTERISTIC CURVES

RMS ON-STATE CURRENT vs. CASE TEMPERATURE



MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE

