

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CS92BZ
CS92DZ
CS92MZ

SILICON CONTROLLED RECTIFIER
0.8 AMPS, 200 THRU 600 VOLTS

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CS92BZ 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	CS92BZ	CS92DZ	CS92MZ	UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _{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
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
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	θ _{J-A}		200		°C/W
Thermal Resistance	θ _{J-C}		100		°C/W

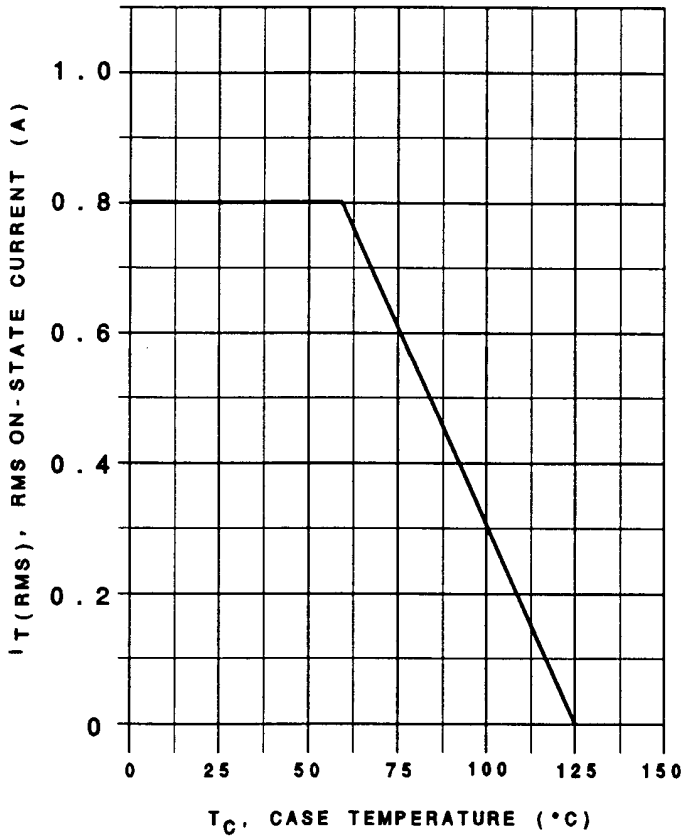
ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM} , I _{RRM}	Rated V _{DRM} , V _{RRM} , R _{GK} = 1KΩ			1.00	μA
I _{DRM} , I _{RRM}	Rated V _{DRM} , V _{RRM} , R _{GK} = 1KΩ, T _C = 125°C			100	μA
I _{GT}	V _D = 12V			20	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	50			V/μs

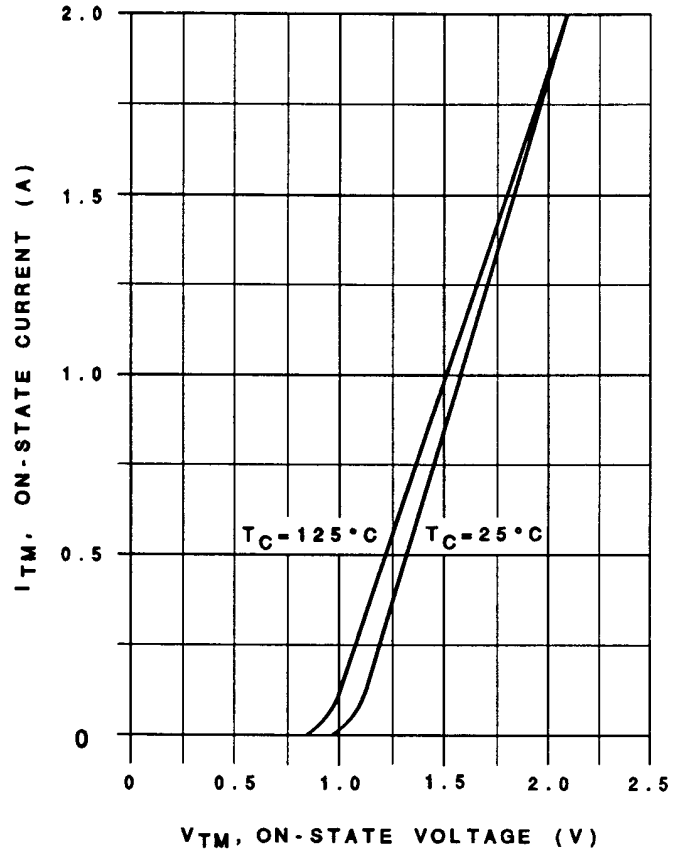
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CS92BZ SERIES RATING AND CHARACTERISTIC CURVES

RMS ON-STATE CURRENT vs. CASE TEMPERATURE



MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE

