

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CS218-55B
CS218-55D
CS218-55M
CS218-55N
CS218-55P
CS218-55PB

SILICON CONTROLLED RECTIFIER
55 AMP, 200 THRU 1200 VOLTS

TO-218 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CS218-55B series type is an Epoxy Molded Silicon SCR designed for sensing circuit applications and control systems.

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

	SYMBOL	CS218 -55B	CS218 -55D	CS218 -55M	CS218 -55N	CS218 -55P	CS218 -55PB	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)}				55			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}				40			W
Average Gate Power Dissipation	P _{G(AV)}				1.0			W
Peak Forward Gate Current (tp = 10μs)	I _{FGM}				8.0			A
Peak Forward Gate Voltage (tp = 10μs)	V _{FGM}				16			V
Peak Reverse Gate Voltage	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-A}				50			°C/W
Thermal Resistance	θ _{J-C}				0.8			°C/W

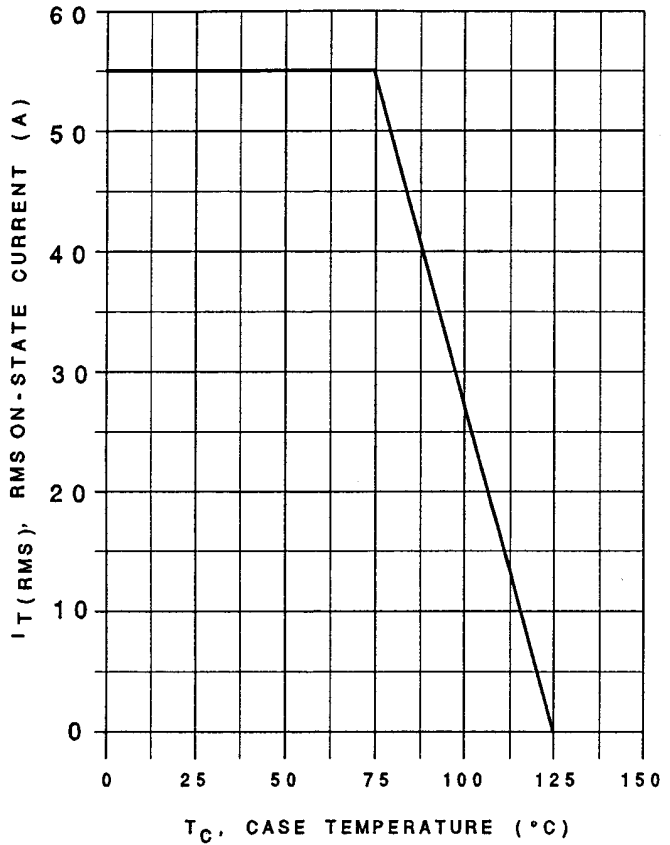
ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted)

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} = 110A, tp = 380ms			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

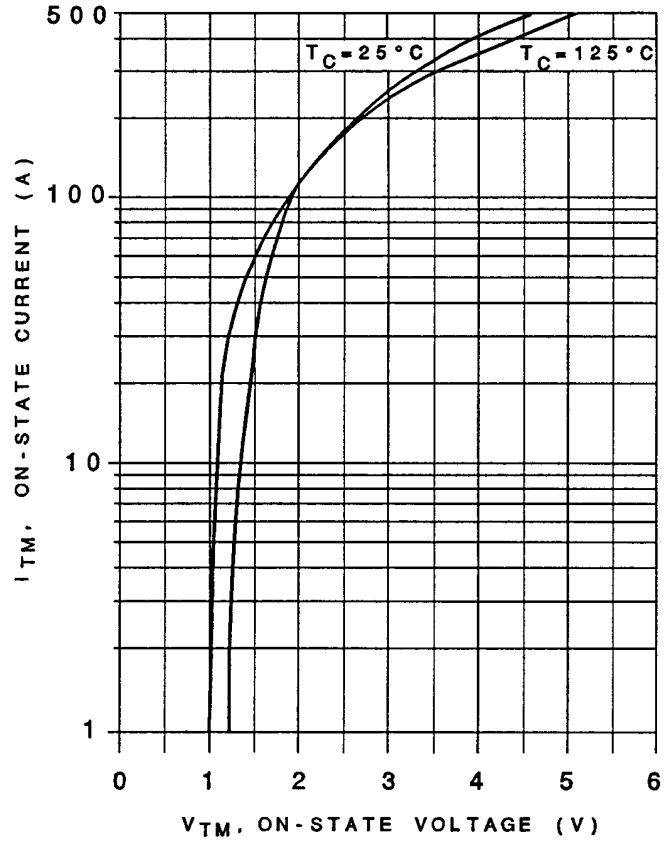
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CS218-55B SERIES RATING AND CHARACTERISTIC CURVES

RMS ON-STATE CURRENT vs. CASE TEMPERATURE



MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE

ALL DIMENSIONS IN INCHES (mm).

