Central™
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Manufacturers of World Class Discrete Semiconductors

Data Sheet

2N3668
2N3669
2N3670
2N4103

SILICON CONTROLLED RECTIFIER
16 AMPS
220 THRU 800 VOLTS

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3668, 2N3669, 2N3670, 2N4103 types are hermetically sealed silicon SCR's designed for sensing circuit applications and control systems. Higher voltage devices and electrical selections are available on special order.

MAXIMUM RATINGS (T_C=25° unless otherwise noted)

	SYMBOL	2N3668	2N3669	2N3670	2N4103	UNIT
Peak Repetitive Off-State Voltage	V_{RRM}	100	200	400	600	V
Peak Repetitive Off-State Voltage	V_{DRM}	200	400	600	800	V
RMS On-State Current (T_C=90°C)	$I_{T(RMS)}$		16			A
Peak One Cycle Surge (60Hz, T_C=80°C)	I_{TSM}		200			A
Peak Gate Current	I_{GM}		4.0			A
Average Gate Power Dissipation	$P_{G(AV)}$		0.5			W
Operating and Storage Junction Temperature	T_J, T_{STG}		-40 TO +125			°C
Thermal Resistance	Θ_{JC}		1.7			°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
I_{RRM}	V_R=Rated V_{RRM}, T_C=100°C			1.0	mA
I_{DRM}	V_D=Rated V_{DRM}, T_C=100°C			2.0	mA
V_{TM}	I_T=25A			1.8	V
I_{GT}	V_D=7.0V	1.0		40	mA
V_{GT}	V_D=7.0V			2.0	V
I_H	R_G=1.0kΩ	0.5		50	mA
dv/dt	V_D.67 x V_{DRM}, R_G=1.0kΩ, T_C=100°C	10	400		V/μs
t_{gd}	I_G=125mA, diG/dt=1.25A/μs			500	ns
t_q	V_D=.67 x V_{DRM}, V_R=35V, I_T=10A, T_C=90°C			50	μs