

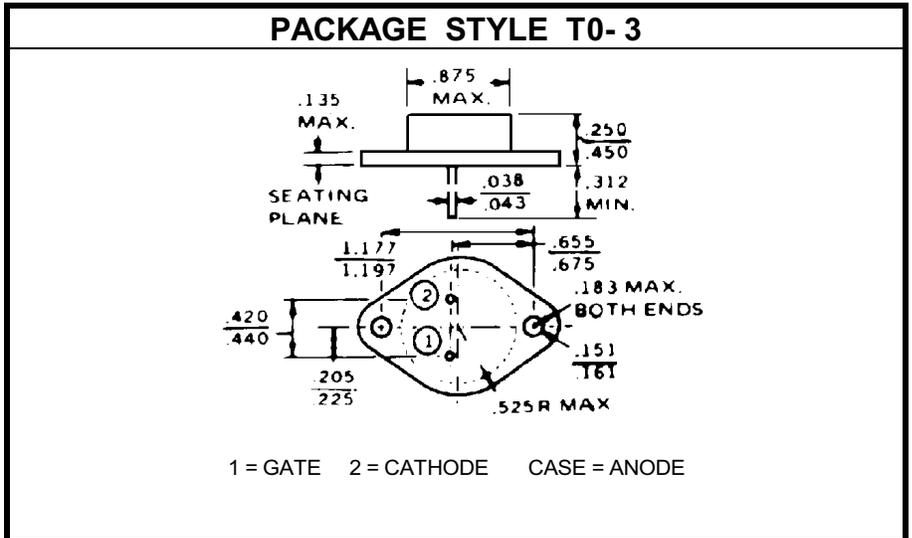
SILICON CONTROLLED RECTIFIER (SCR)

DESCRIPTION:

The **2N3668** is Designed for General Purpose Industrial Power Control Applications.

MAXIMUM RATINGS

I_c	12.5 A (RMS) @ T _C = 80 °C 8.0 A (AVG) @ T _C = 80 °C
V_{CE}	100 V
P_{DISS}	P _{GM} = 5.0 W P _{G(AVG)} = 0.5 W
T_J	-65 °C to +100 °C
T_{STG}	-65 °C to +125 °C
θ_{JC}	1.7 °C/W


CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{DRM}/I_{RRM}	V _{DRM} /V _{RRM} = 100 V			10	μA
I_{DRM}	V _{DRM} = 100 V T _J = 100 °C			2.5	mA
I_{RRM}	V _{RRM} = 100 V T _J = 100 °C			1.25	mA
V_{TM}	I _{TM} = 25 A			1.8	V
I_{GT}	V _D = 12 V R _L = 24 Ω T _J = 25 °C T _J = -40 °C			40 80	mA
V_{GT}	V _D = 12 V R _L = 24 Ω T _J = 25 °C T _J = -40 °C T _J = 100 °C	0.3		2.0 3.0	V
I_H	V _D = 12 V I _T = 500 mA			50	
t_{gt}	I _{GT} = 200 mA I _T = 8.0 A V _D = 100 V		0.5		μS
t_q	I _T = 8.0 A I _G = 200 mA dv/dt = 20 V/μS V _D = 100 V di/dt = 30 A/μS T _C = 80 °C		20		μS
I_{TSM}	½ Cycle @ 60 Hz T _J = -40 °C to 100 °C			200	A
I²t	FUSING t = 8.3 mS T _J = -40 °C to 100 °C			170	A ² S
dv/d_T	EXPONENTIAL to 100 V T _C = 100 °C GATE OPEN	10	100		V/μS