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SCR

ELECTRICAL SPECIFICATIONS (at 25°C unless noted)†

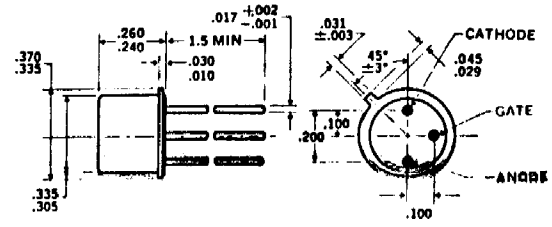
Test	Symbol	Min.	Typical	Max.	Units	Test Conditions
Subgroup 1 (Visual and Mechanical)						
Subgroup 2 (25°C Tests)						
Off-State Current	I_{DRM}	—	0.5	5	μA	V_{DRM} = Rating, R_{GK} = 1K
Reverse Current	I_{RRM}	—	0.5	10	μA	V_{RRM} = Rating
Reverse Gate Current	I_{GR}	—	0.5	10	μA	V_{GR} = 2V
Gate Trigger Current	I_{GT}	—	5	20	μA	V_D = 5V, R_{GS} = 10K
Gate Trigger Voltage	V_{GT}	.44	.52	.60	V	V_D = 5V, R_{GS} = 100Ω
Anode Trigger Current (Note 2)	I_{AT}	—	100	—	μA	V_D = 5V
On-State Voltage	V_T	0.8	1.8	2.5	V	I_T = 2A (Pulse Test)
Holding Current	I_H	0.3	1.0	3	mA	I_G = −150μA, V_{AA} = 5V
Subgroup 3 (25°C Tests)						
Turn-on Time	t_{on}	—	0.1	—	μs	I_G = 20mA
Turn-off Time	t_{off}	—	0.5	—	μs	I_T = .5A
Gate Trigger — on Pulse Width	$t_{pg(on)}$	—	0.5	—	μs	V_D = 30V
Circuit Commutated Turn-off Time	t_q	—	10	—	μs	I_T = .5A, i_R = .5A, R_{GK} = 1K
Subgroup 4 (125°C Tests)						
High Temp. Off-State Current	I_{DRM}	—	5	20	μA	V_D = Rating, R_{GK} = 1K
High Temp. Reverse Current	I_{RRM}	—	15	100	μA	V_{RRM} = Rating

Note: 1. Voltage ratings apply over the operating temperature range, provided the gate is connected to the cathode through an appropriate resistor, or adequate gate bias is used.

ABSOLUTE MAXIMUM RATINGS

Repetitive Peak Off-State Voltage, V_{DRM} 100V
Repetitive Peak Reverse Voltage, V_{RRM} 100V
D.C. On-State Current, I_T
100°C Ambient 250mA
100°C Case 1.25A
Repetitive Peak On-State Current, I_{TRM} ..... up to 30A
Peak One Cycle Surge (Non-Rep.) On-State Current, I_{TSM} 15A
Peak Gate Current, I_{GM} 250mA
Average Gate Current, $I_{G(AV)}$ 25mA
Reverse Gate Voltage, V_{GR} 5V
Thermal Resistance, Junction to Case, RO_{J-C} ..... 20°C/W
Operating and Storage Temperature Range ..... −65°C to +150°C

MECHANICAL SPECIFICATIONS



Dimensions in inches.

Quality Semi-Conductors