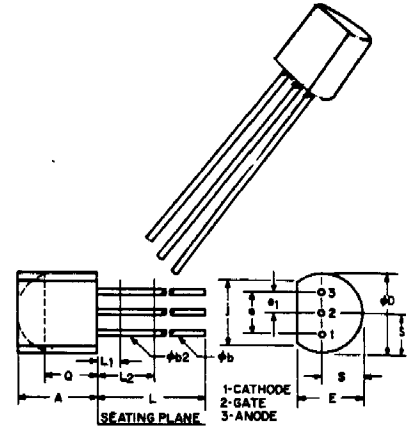


Silicon
Controlled Rectifier
0.8A RMS UP TO 400 VOLTS



SYMBOL	INCHES		MILLIMETERS		NOTES
	MIN.	MAX.	MIN.	MAX.	
A	.170	.210	4.58	5.33	
ϕ_b	.016	.021	4.07	.533	1,3
ϕ_{b2}	.016	.019	4.07	.482	3
ϕ_D	.175	.205	4.96	5.20	
E	.125	.165	3.94	4.19	
e	.095	.105	2.42	2.66	
ϕ_1	.045	.055	1.15	1.39	
J	.135	-	3.43	-	
L	.500	-	12.70	-	1,3
L ₁	-	.050	-	1.27	3
L ₂	.250	-	6.35	-	3
Q	.115	-	2.93	-	2
S	.080	.105	2.42	2.66	

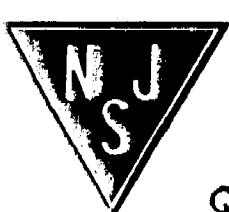
- NOTES:
 1. THREE LEADS.
 2. CONTOUR OF THE PACKAGE BEYOND THIS ZONE IS UNCONTROLLED.
 3. (THREE LEADS) ϕ_{b2} APPLIES BETWEEN L₁ AND L₂. ϕ_b APPLIES BETWEEN L₂ AND .5 INCH (12.70 MM) FROM SEATING PLANE. DIAMETER IS UNCONTROLLED IN L₁ AND BEYOND .5 INCH (12.70 MM) FROM SEATING PLANE.

MAXIMUM ALLOWABLE RATINGS

TYPE	REPETITIVE PEAK OFF-STATE VOLTAGE, $V_{DRM}^{(1)}$ $T_C = -65^\circ\text{C to } +125^\circ\text{C}$	REPETITIVE PEAK REVERSE VOLTAGE, $V_{DRM}^{(2)}$ $T_C = -65^\circ\text{C to } +125^\circ\text{C}$
	C203Y	30 Volts
C203YY	60 Volts	60 Volts
C203A	100 Volts	100 Volts
C203B	200 Volts	200 Volts
C203C	300 Volts	300 Volts
C203D	400 Volts	400 Volts

¹ $R_{GK} = 1000$ ohms maximum.
² Values apply for zero or negative gate voltage only.

- RMS On-State Current, $I_{T(RMS)}$ (all Conduction Angles) 0.8 Amperes
 Peak One Cycle Surge (non-rep) On-State Current, I_{TSM} 8.0 Amperes
 Peak Gate Power Dissipation, P_{GM} 1.0 Watts for 8.3 msec.
 Average Gate Power Dissipation, $P_{G(AV)}$ 0.01 Watts
 Peak Positive Gate Current, I_{GM} 0.5 Amperes
 Peak Negative Gate Voltage, V_{GM} 8 Volts
 Storage Temperature, T_{STG} $-65^\circ\text{C to } +150^\circ\text{C}$
 Operating Junction Temperature, T_J $-65^\circ\text{C to } +125^\circ\text{C}$



TEST	SYMBOL	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
Peak Reverse and Off-State Current (All Types)	I_{RRM} or I_{DRM}	—	—	1.0	μA	$T_C = +25^\circ C$, $R_{GK} = 1000$ ohms $V_{RRM} = V_{DRM} = \text{Rated Value}$.
		—	—	50		$T_C = +125^\circ C$, $R_{GK} = 1000$ ohms $V_{RRM} = V_{DRM} = \text{Rated Value}$.
DC Gate Trigger Current	I_{GT}	—	—	200	μA_{dc}	$T_C = +25^\circ C$, $V_D = 6V_{dc}$, $R_L = 100$ ohms.
		—	—	500		$T_C = -65^\circ C$, $V_D = 6V_{dc}$, $R_L = 100$ ohms.
DC Gate Trigger Voltage	V_{GT}	—	—	0.8	Vdc	$T_C = +25^\circ C$, $V_D = 6V_{dc}$, $R_L = 100$ ohms.
		—	—	1.0		$T_C = -65^\circ C$, $V_D = 6V_{dc}$, $R_L = 100$ ohms.
		0.1	—	—		$T_C = +125^\circ C$, Rated V_{DRM} , $R_L = 1000$ ohms.
Peak On-State Voltage	V_{TM}	—	—	1.5	V	$T_C = +25^\circ C$, $I_{TM} = 1.0A$ peak, 1 msec. wide pulse, Duty Cycle $\leq 2\%$
Holding Current	I_H	—	—	5.0	mA _{dc}	Anode source voltage = 12Vdc, $R_{GK} = 1000$ ohms. $T_C = +25^\circ C$.
		—	—	10.0		$T_C = -65^\circ C$
Critical Rate-of-Rise of Off-State Voltage	dv/dt	—	20	—	V/ μ sec	$T_C = +125^\circ C$, Rated V_{DRM} , $R_{GK} = 1000$ ohms.
Circuit Commutated Turn-Off Time	t_q	—	15	—	μ sec	$T_C = +125^\circ C$, rectangular current waveform. Rate-of-rise of current $< 10A/\mu$ sec. Rate reversal of current $< 5A/\mu$ sec. $I_{TM} = 1A$ (50 μ sec. pulse). Rep. Rate = 60 pps. $V_{RRM} = \text{Rated}$, $V_{RX} = 15V$ Min., $V_{DRM} = \text{Rated}$. Rate-of-rise of reapplied off-state voltage = 20V/ μ sec.; Gate Bias = 0 Volts, 100 Ohms (during turn-off time interval).
Steady-State Thermal Resistance	$R_{\theta JC}$	—	—	125	$^\circ C/W$	Junction-to-case (flat side of case is temperature reference point).
	$R_{\theta JA}$	—	—	230		Junction-to-ambient (free convection).