

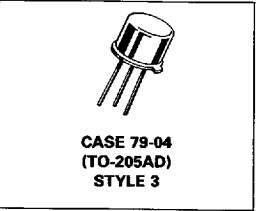
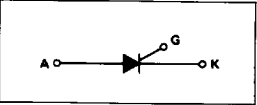
Silicon Controlled Rectifiers Reverse Blocking Triode Thyristors

... all diffused PNP devices designed for gating operation in mA/ μ A signal or detection circuits.

- Low-Level Gate Characteristics — $I_{GT} = 200 \mu A$ (Max) @ 25°C
- Low Holding Current — $I_H = 2 mA$ (Max) @ 25°C
- Anode Common to Case
- Glass-to-Metal Bond for Maximum Hermetic Seal

**2N2323
thru
2N2329**

**SCRs
1.6 AMPERES RMS
50 thru 400 VOLTS**



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***MAXIMUM RATINGS** ($T_J = 25^\circ C$, $R_{GK} = 1000$ ohms unless otherwise noted.)

Rating	Symbol	Value	Unit
Peak Repetitive Forward and Reverse Blocking Voltage, Note 1 ($T_J = 25$ to $125^\circ C$)	V_{DRM} or V_{RRM}	50 100 200 400	Volts
Non-Repetitive Peak Reverse Blocking Voltage ($T_J = 25$ to $125^\circ C$) ($t \leq 5$ ms)	V_{RSM}	75 150 300 500	Volts
RMS On-State Current (All Conduction Angles, $T_C = 85^\circ C$)	$I_T(RMS)$	1.6	Amps
Average On-State Current $T_C = 85^\circ C$ $T_A = 30^\circ C$	$I_T(AV)$	1 0.45	Amp
Peak Non-Repetitive Surge Current (One cycle, 60 Hz, $T_C = 80^\circ C$) Preceded and followed by rated current and voltage	I_{TSM}	15	Amps

*Indicates JEDEC Registered Data.

(cont.)

Note 1. V_{DRM} and V_{RRM} for all types can be applied on a continuous basis. Ratings apply for zero or negative gate voltage; however, positive gate voltage shall not be applied concurrent with negative potential on the anode. Blocking voltages shall not be tested with a constant current source such that the voltage ratings of the devices are exceeded.

2N2323 thru 2N2329

*MAXIMUM RATINGS — continued ($T_C = 25^\circ\text{C}$ unless otherwise noted, $R_{GK} = 1000$ ohms.)

Rating	Symbol	Value	Unit
Peak Gate Power	P_{GM}	0.1	Watt
Average Gate Power	$P_{G(AV)}$	0.01	Watt
Peak Gate Current	I_{GM}	0.1	Amp
Peak Gate Voltage	V_{GM}	6	Volts
Operating Junction Temperature Range	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$
Lead Solder Temperature ($>1/16"$ from case, 10 s max)	—	+230	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$ unless otherwise noted, $R_{GK} = 1000$ ohms.)

Characteristic	Symbol	Min	Max	Unit
*Peak Forward or Reverse Blocking Current ($V_{AK} = \text{Rated } V_{DRM} \text{ or } V_{RRM}$) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_{DRM}, I_{RRM}	— —	10 100	μA μA
Peak On-State Voltage ($I_{TM} = 1$ A peak) ($I_{TM} = 3.14$ A Peak, $T_C = 85^\circ\text{C}$)*	V_{TM}	— —	1.5 2	Volts
Gate Trigger Current (Continuous dc), Note 1 ($V_D = 6$ Vdc, $R_L = 100$ ohms) ($V_D = 6$ Vdc, $R_L = 100$ ohms, $T_C = -65^\circ\text{C}$)	I_{GT}	— —	200 350*	μA
Gate Trigger Voltage (Continuous dc) ($V_D = 6$ Vdc, $R_L = 100$ ohms) ($V_D = 6$ Vdc, $R_L = 100$ ohms, $T_C = -65^\circ\text{C}$)* ($V_D = \text{Rated } V_{DRM}$, $R_L = 100$ ohms, $T_J = 125^\circ\text{C}$)*	V_{GT}	— — 0.1	0.8 1 —	Volts
Holding Current ($V_D = 6$ Vdc) ($V_D = 6$ Vdc, $T_C = -65^\circ\text{C}$)* ($V_D = 6$ Vdc, $T_C = 125^\circ\text{C}$)*	I_H	— — 0.15	2 3 —	mA

*Indicates JEDEC Registered Data.

Note 1. R_{GK} current is not included in measurement.

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CURRENT DERATING

FIGURE 1 — CASE TEMPERATURE

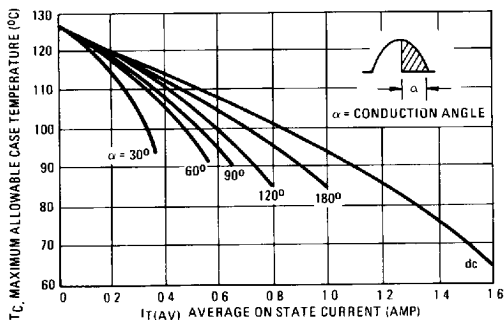


FIGURE 2 — AMBIENT TEMPERATURE

