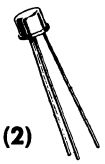
2N1595 thru 2N1599 (SILICON)



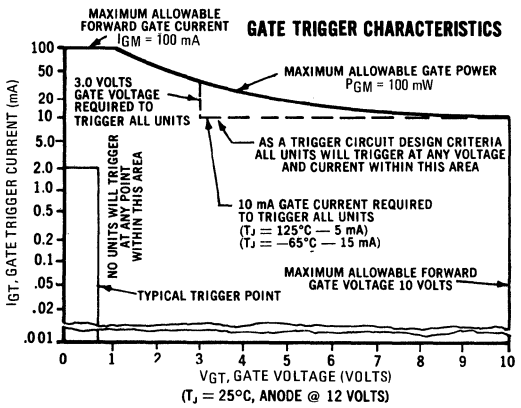
CASE 31(2)
(TO-5)

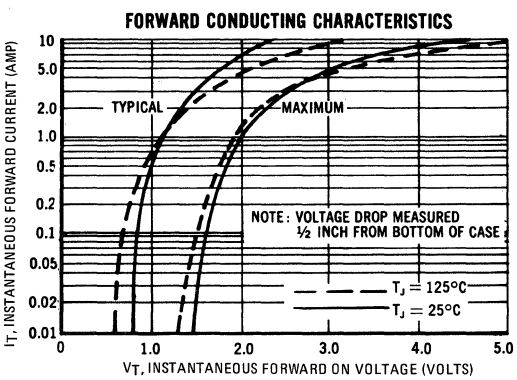
Industrial-type, low-current silicon controlled rectifiers in a three-lead package ideal for printed-circuit applications. Current handling capability of 1.6 amperes at junction temperatures to 125°C.

MAXIMUM RATINGS (T_J = 125°C unless otherwise noted)

Rating	Symbol	Value	Unit
Peak Reverse Blocking Voltage*	$V_{RSM(rep)}$*		Volts
2N1595		50	
2N1596		100	
2N1597		200	
2N1598		300	
2N1599		400	
Forward Current RMS (All Conduction Angles)	$I_{T(RMS)}$	1.6	Amp
Peak Forward Surge Current (One Cycle, 60 Hz, T_J = -65 to +125°C)	I_{TSM}	15	Amp
Peak Gate Power - Forward	P_{GM}	0.1	Watt
Average Gate Power - Forward	$P_{G(AV)}$	0.01	Watt
Peak Gate Current - Forward	I_{GM}	0.1	Amp
Peak Gate Voltage - Forward	V_{GFM}	10	Volts
Reverse	V_{GRM}	10	
Operating Junction Temperature Range	T_J	-65 to +125	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C

*V_{RSM} for all types can be applied on a continuous dc basis without incurring damage.





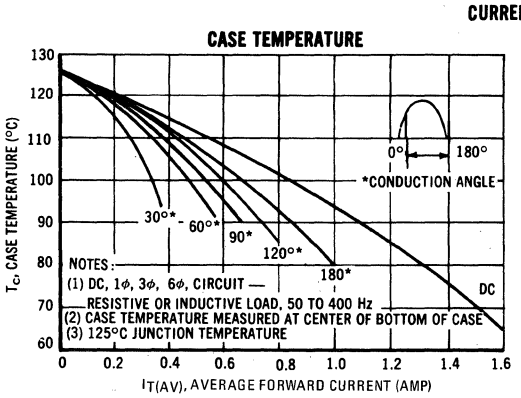
2N1595 thru 2N1599 (continued)

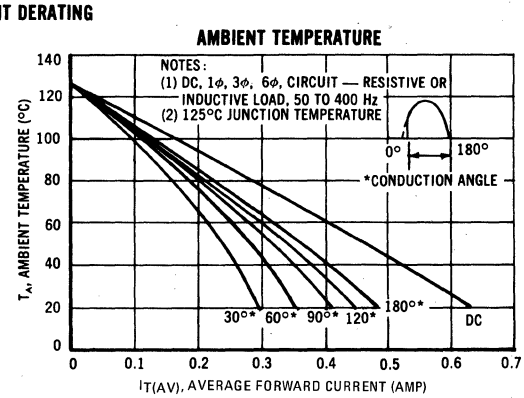
ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted)

Characteristic		Symbol	Min	Typ	Max	Units
Peak Forward Blocking Voltage* (T_J = 125°C)	2N1595	V_{DRM}*	50	—	—	Volts
	2N1596		100	—	—	
	2N1597		200	—	—	
	2N1598		300	—	—	
	2N1599		400	—	—	
Peak Forward Blocking Current (Rated V_{DRM} with gate open, T_J = 125°C)		I_{DRM}	—	—	1.0	mA
Peak Reverse Blocking Current (Rated V_{RSM}, T_J = 125°C)		I_{RRM}	—	—	1.0	mA
Gate Trigger Current (Continuous dc) (Anode Voltage = 7 Vdc, R_L = 12 Ω)		I_{GT}	—	2.0	10.0	mA
Gate Trigger Voltage (Continuous dc) (Anode Voltage = 7 Vdc, R_L = 12 Ω)		V_{GT}	—	0.7	3.0	Volts
(V_{DRM} = Rated, R_L = 12 Ω, T_J = 125°C)		V_{GNT}	0.2	—	—	
Holding Current (Anode Voltage = 7 Vdc, Gate Open)		I_H	—	5.0	—	mA
Forward On Voltage (I_T = 1 Adc)		V_{TM}	—	1.1	2.0	Volts
Turn-On Time (t_d + t_r) (I_{GT} = 10 mA, I_T = 1A)		t_{gt}	—	0.8	—	μs
Turn-Off Time (I_T = 1 A, I_R = 1 A, dv/dt = 20 V/μs, T_J = 125°C) (V_{DRM} = rated voltage)		t_q	—	10	—	μs

*V_{DRM} for all types can be applied on a continuous dc basis without incurring damage.

CURRENT DERATING





2N1613 (SILICON)

For Specifications, See 2N718A Data.