COMSET SEMICONDUCTORS

2N1595 thru 2N1599

SILICON THYRISTOR

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 temperetures to 125°C

MAXIMUM RATINGS (*)

T_J=125°C unless otherwise noted

Symbol	Ratings	2N1595	2N1596	2N1597	2N1598	2N1599	
$V_{RSM(REP)}$	Peak reverse blocking voltage *	50	100	200	300	400	V
$I_{T(RMS)}$	Forward Current RMS (all conduction angles)	1.6					Amp
I_{TSM}	Peak Surge Current (One Cycle, 60Hz, T_J=-65 to +125°C)	15					Amp
P_{GM}	Peak Gate Power – Forward	0.1					W
$P_{G(AV)}$	Average Gate Power - Forward	0.01					W
I_{GM}	Peak Gate Current – Forward	0.1					Amp
V_{GFM}	Peak Gate Voltage - Forward	10					V
V_{GRM}	Peak Gate Voltage - Reverse	10					V
T_J	Operating Junction Temperature Range	-65 to +125					°C
T_{STG}	Storage Temperature Range	-65 to +150					

ELECTRICAL CHARACTERISTICS

T_J=25°C unless otherwise noted, R_{GK}=1000Ω

Symbol	Ratings		2N1595	2N1596	2N1597	2N1598	2N1599	
V_{DRM}	Peak Forward Blocking Voltage *	Min :	50	100	200	300	400	V
I_{RRM}	Peak Reverse Blocking Current (Rated V_{DRM}, T_J =125°C)		Max : 1.0					mA

2N1595 thru 2N1599

Symbol	Ratings	2N1595	2N1596	2N1597	2N1598	2N1599	
I_{DRM}	Peak Forward Blocking Current (Rated V_{DRM} with gate open , T_J =125°C)	Max :1.0					mA
I_{GT}	Gate Trigger Current (2) Anode Voltage=7.0 Vdc, R_L=12Ω	Typ : 2.0 Max : 10					mA
V_{GT}	Gate Trigger Voltage Anode Voltage=7.0 Vdc, R_L=12Ω	Typ : 0.7 Max : 3.0					V
	V_{DRM} = Rated, R_L=100Ω, T_J=125°C	Min : 0.2					
I_H	Holding Current Anode Voltage=7.0 Vdc, gate open	Typ : 5.0					mA
V_{TM}	Forward On Voltage I_T=1 Adc	Typ : 1.1 Max : 2.0					V
t_{gt}	Turn-On Time (t_d+t_r) I_{GT}=10 mA, I_T=1 A	Typ : 0.8					µs
t_q	Turn-Off Time I_T=1 A, I_R =1 A, dv/dt=20 V/µs, T_J=125°C V_{DRM} = Rated Voltage	Typ : 10					µs

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

MECHANICAL DATA CASE TO-39

DIMENSIONS		
	mm	inches
A	6,25	0,24
B	13,59	0,53
C	9,24	0,36
D	8,24	0,32
E	0,78	0,03
F	1,05	0,041
G	0,42	0,165
H	45°	
L	5,1	0,2

Pin 1 :	Cathode
Pin 2 :	Gate
Pin 3 :	Anode