

1-130

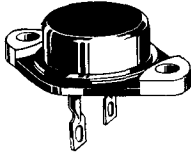
2N2262-2N2888

THYRISTOR INDEX (continued)

TYPE	REPLACEMENT	PAGE NUMBER	I_F A	V_{FOM}/V_{ROM} V	T_J °C	I_{GT} mA	V_{GT} V
2N2262*			200	30	100	5.0	
2N2322		4-21	1.6	25	125	0.2	0.8
2N2322A		4-21	1.6	25	125	0.02	0.6
2N2323		4-21	1.6	50	125	0.2	0.8
2N2323A		4-21	1.6	50	125	0.02	0.6
2N2324		4-21	1.6	100	125	0.2	0.8
2N2324A		4-21	1.6	100	125	0.02	0.6
2N2325		4-21	1.6	150	125	0.2	0.8
2N2325A		4-21	1.6	150	125	0.02	0.6
2N2326		4-21	1.6	200	125	0.2	0.8
2N2326A		4-21	1.6	200	125	0.02	0.6
2N2327			1.6	250	125	0.2	0.8
2N2327A			1.6	250	125	0.02	0.6
2N2328			1.6	300	125	0.2	0.8
2N2328A			1.6	300	125	0.02	0.6
2N2329			1.6	400	125	0.2	0.8
2N2329A			1.6	400	125	0.02	0.6
2N2344			1.6	25	100	0.02	0.8
2N2345			1.6	50	100	0.02	0.8
2N2346			1.6	100	100	0.02	0.8
2N2347			1.6	150	100	0.02	0.8
2N2348			1.6	200	100	0.02	0.8
2N2454			3.0	400	105	15	3.0
2N2502	2N1850A	4-18	7.0	500	125	75	3.0
2N2503			225	50	125	100	2.5
2N2504			225	100	125	100	2.5
2N2505			225	200	125	100	2.5
2N2506			225	300	125	100	2.5
2N2507			225	400	125	100	2.5
2N2508			225	500	125	100	2.5
2N2542			230	50	125	125	3.0
2N2543			230	100	125	125	3.0
2N2544			230	200	125	125	3.0
2N2545			230	300	125	125	3.0
2N2546			230	400	125	125	3.0
2N2547			230	500	125	125	3.0
2N2548			230	600	125	125	3.0
2N2549			150	800	125	125	3.0
2N2550		4-23	150	1000	125	125	3.0
2N2573			25	25	125	40	3.5
2N2574			25	50	125	40	3.5
2N2575			25	100	125	40	3.5
2N2576			25	200	125	40	3.5
2N2577			25	300	125	40	3.5
2N2578			25	400	125	40	3.5
2N2579			25	500	125	40	3.5
2N2619	2N4174	4-26	7.4	600	125	45	2.0
2N2653	2N4172	4-26	3.0	400	105	35	3.0
2N2679			0.35	30	150	0.02	0.7
2N2679A			0.35	30	150	0.02	0.7
2N2680			0.35	60	150	0.02	0.7
2N2680A			0.35	60	150	0.02	0.7
2N2681			0.35	100	150	0.02	0.7
2N2681A			0.35	100	150	0.02	0.70
2N2682			0.35	200	150	0.02	0.7
2N2682A			0.35	200	150	0.02	0.70
2N2683			0.28	30	125	0.02	0.8
2N2683A			0.28	30	125	0.02	0.80
2N2684			0.28	60	125	0.02	0.8
2N2684A			0.28	60	125	0.02	0.80
2N2685			0.28	100	125	0.02	0.8
2N2685A			0.28	100	125	0.02	0.80
2N2686			0.28	200	125	0.02	0.8
2N2686A			0.28	200	125	0.02	0.80
2N2687			0.28	30	125	0.2	1.0
2N2688			0.28	60	125	0.2	1.0
2N2689			0.28	100	125	0.2	1.0
2N2690			0.28	200	125	0.2	1.0
2N2888			25	200	125	40	1.5

2N2573 thru 2N2579

$I_f = 25 \text{ A RMS}$
 $V_{\text{ROM(rep)}} = 25\text{-}500 \text{ V}$



Industrial-type, silicon controlled rectifiers in a "diamond" package for applications requiring a high surge-current rating or low thermal resistance.

CASE 61 **CASE 54**
(TO-41) **(TO-3)**

For units with pins (TO-3) specify devices MCR649AP-1(2N2573) thru MCR649AP-7(2N2579).

MAXIMUM RATINGS ($T_J = 125^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Peak Reverse Blocking Voltage* 2N2573 2N2574 2N2575 2N2576 2N2577 2N2578 2N2579	$V_{\text{ROM(rep)}}^*$	25 50 100 200 300 400 500	Volts
Forward Current RMS (all conduction angles)	I_f	25	Amp
Circuit Fusing Considerations ($T_J = -65^\circ$ to $+125^\circ\text{C}$, $t \leq 8.3 \text{ ms}$)	I^2t	275	A^2s
Peak Surge Current (One Cycle, 60 Hz, $T_J = -65$ to $+125^\circ\text{C}$)	$I_{\text{FM(surge)}}$	260	Amp
Peak Gate Power - Forward	P_{GFM}	5	Watts
Average Gate Power - Forward	$P_{\text{GF(AV)}}$	0.5	Watt
Peak Gate Current - Forward	I_{GFM}	2	Amp
Peak Gate Voltage - Forward Reverse	V_{GFM} V_{GRM}	10 5	Volts
Operating Junction Temperature Range	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$

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

V_{ROM} ratings apply for zero or negative gate voltage.

2N2573 thru 2N2579 (continued)

ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Units
Peak Forward Blocking Voltage* ($T_J = 125^\circ\text{C}$)	V_{FOM}^*	25 50 100 200 300 400 500	— — — — — — —	— — — — — — —	Volts
Peak Forward Blocking Current (Rated V_{FOM} with gate open, $T_J = 125^\circ\text{C}$)	I_{FOM}	—	0.6	5.0	mA
Peak Reverse Blocking Current (Rated V_{ROM} , $T_J = 125^\circ\text{C}$)	I_{ROM}	—	0.6	5.0	mA
Gate Trigger Current (Continuous dc) (Anode Voltage = 7 Vdc, $R_L = 100\ \Omega$)	I_{GT}	—	20	40	mA
Gate Trigger Voltage (Continuous dc) (Anode Voltage = 7 Vdc, $R_L = 100\ \Omega$) (Anode Voltage = Rated V_{FOM} , $R_L = 100\ \Omega$, $T_J = 125^\circ\text{C}$)	V_{GT} V_{GNT}	— 0.3	1.0 —	3.5 3.5	Volts
Forward On Voltage ($I_F = 20\text{ Adc}$)	V_F	—	1.1	1.4	Volts
Holding Current (Anode Voltage = 7 Vdc, Gate Open)	I_{HO}	—	20	—	mA
Turn-On Time ($t_d + t_r$) ($I_G = 50\text{ mA}$, $I_F = 10\text{ A}$)	t_{on}	—	1.0	—	μs
Turn-Off Time ($I_F = 10\text{ A}$, $I_R = 10\text{ A}$, $dv/dt = 20\text{ V}/\mu\text{s}$, $T_J = 125^\circ\text{C}$) (V_{FXM} = rated voltage) (V_{RXM} = rated voltage)	t_{off}	—	30	—	μs
Forward Voltage Application Rate (Gate Open, $T_J = 125^\circ\text{C}$)	dv/dt	—	30	—	$\text{V}/\mu\text{s}$
Thermal Resistance (Junction to Case)	θ_{JC}	—	1.0	1.5	$^\circ\text{C}/\text{W}$

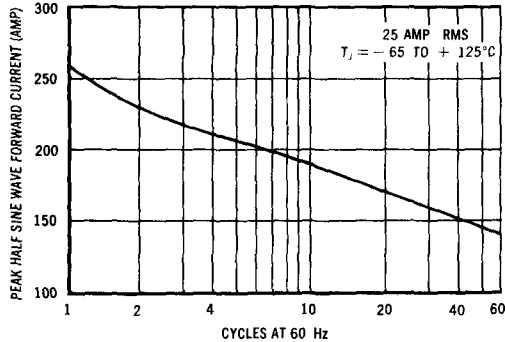
* V_{FOM} for all types can be applied on a continuous dc basis without incurring damage.

V_{FOM} ratings apply for zero or negative gate voltage.

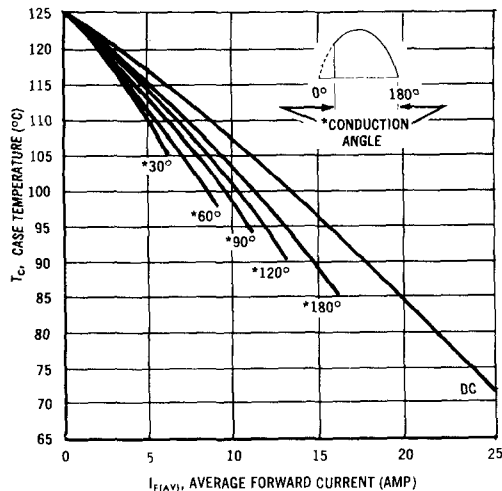
Silicon Controlled Rectifiers

2N2573 thru 2N2579 (continued)

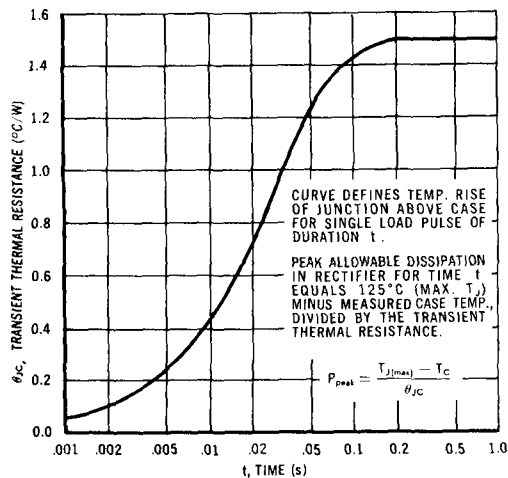
MAXIMUM ALLOWABLE NON-RECURRENT SURGE CURRENT



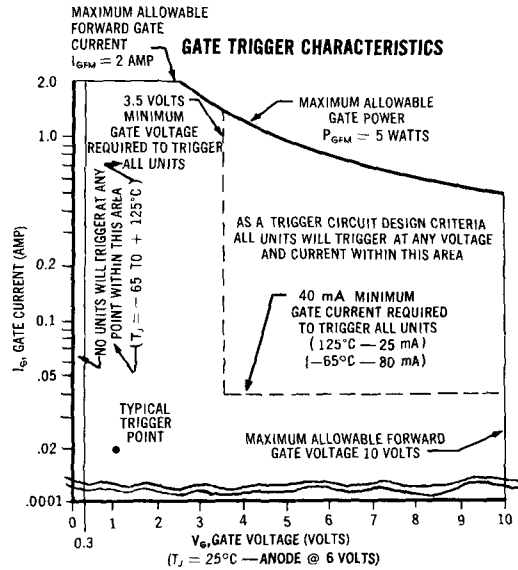
MAXIMUM ALLOWABLE CASE TEMPERATURE



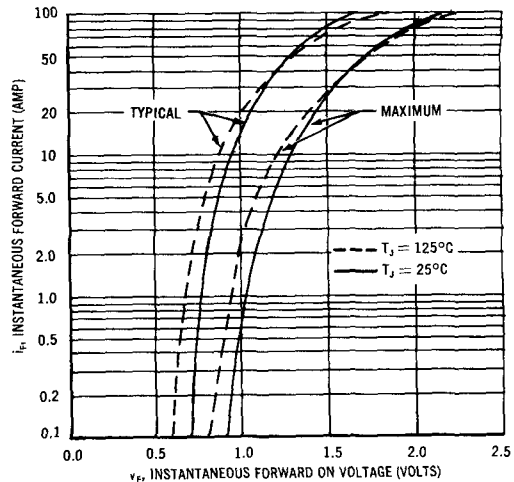
MAXIMUM TRANSIENT THERMAL RESISTANCE JUNCTION TO CASE



GATE TRIGGER CHARACTERISTICS



LOW CURRENT LEVEL



POWER DERATING CURVE

