

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak repetitive forward and reverse blocking voltage ⁽¹⁾ 2N2573 2N2574 2N2575 2N2576 2N2578 2N2579	V_{DRM} or V_{RRM}	25 50 100 200 400 500	Volts
On-state current	$I_{T(RMS)}$	25	Amps
Circuit fusing (8.3ms)	I^2t	280	A ² s
Peak surge current (Half cycle, 60Hz, $T_J = -65^\circ$ to $+125^\circ\text{C}$)	I_{TSM}	260	Amps
Peak gate power – forward	P_{GM}	5	Watts
Average gate power – forward	$P_{G(AVG)}$	0.5	Watts
Peak gate current – forward	I_{GM}	2	Amps
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	$^\circ\text{C}$
Thermal resistance, junction to case	$R_{\theta JC}$	1.5	$^\circ\text{C}/\text{W}$

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

Characteristic	Symbol	Min	Typ	Max	Unit
Peak forward or reverse blocking current (Rated V_{DRM} or V_{RRM} , gate open) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_{DRM}, I_{RRM}	- -	- 0.6	10 5	μA mA
Gate trigger current (continuous dc) ($V_D = 7\text{V}$, $R_L = 100\Omega$)	I_{GT}	-	-	40	mA
Gate trigger voltage (continuous dc) ($V_D = 7\text{V}$, $R_L = 100\Omega$) ($V_D = \text{rated } V_{DRM}$, $R_L = 100\Omega$, $T_J = 125^\circ\text{C}$)	V_{GT}	- 0.3	0.7 -	3.5 -	Volts
Forward on voltage ($I_{TM} = 20\text{A}$)	V_{TM}	-	1.1	1.4	Volts
Holding current ($V_D = 7\text{V}$, gate open)	I_H	-	10	-	mA
Turn-on time ($t_d + t_r$) ($I_{GT} = 50\text{mA}$, $I_T = 10\text{A}$, $V_D = \text{rated } V_{DRM}$)	t_{gt}	-	1	-	μs

2N2573-2N2579

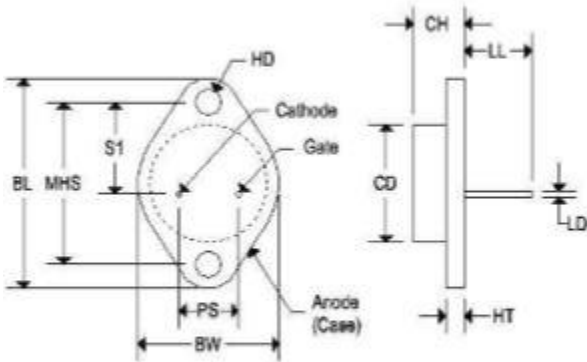
SILICON CONTROLLED RECTIFIERS

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit
Turn-off time (I _T = 10A, I _R = 10A, dv/dt = 20V/μs, T _J = 125°C) (V _D = rated voltage V _{DRM})	t _q	-	30	-	μs
Forward voltage application rate (exponential) (Gate open, T _J = 125°C, V _D = rated V _{DRM})	dv/dt	-	30	-	V/μs

MECHANICAL CHARACTERISTICS

Case:	TO-3
Marking:	Body painted, alpha-numeric
Pin out:	See below



	TO-3			
	Inches		Millimeters	
	Min	Max	Min	Max
CD	-	0.875	-	22.220
CH	0.250	0.380	6.860	9.650
HT	-	0.135	-	3.430
BW	-	1.050	-	26.670
HD	0.131	0.188	3.330	4.780
LD	0.038	0.043	0.970	1.090
LL	0.312	0.500	7.920	12.700
BL	1.550 REF		39.370 REF	
MHS	1.177	1.197	29.900	30.400
PS	0.420	0.440	10.670	11.180
S1	0.655	0.675	16.640	17.150

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SILICON CONTROLLED RECTIFIERS

FIGURE 1 – CURRENT DERATING

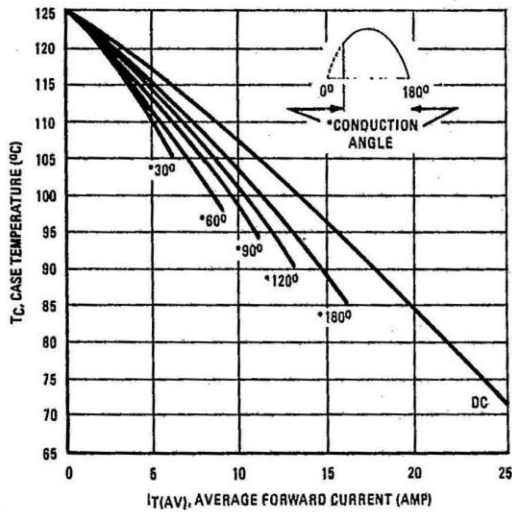


FIGURE 2 – GATE TRIGGER CHARACTERISTICS

