

2N6077-2N6079

NPN SILICON HIGH POWER TRANSISTORS

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

Ratings	Symbol	2N6077	2N6078	2N6079	Unit
Collector-Emitter Voltage	V_{CE0}	275	250	350	Vdc
Collector-Base Voltage	V_{CBO}	300	275	375	Vdc
Emitter-Base Voltage	V_{EBO}	6.0			Vdc
Collector Current	I_C	7.0			Adc
Total Power Dissipation $T_C = 25^\circ\text{C}$	P_D	45			W
Junction Temperature	T_J	150			$^\circ\text{C}$
Storage Junction Temperature Range	T_{stg}	-65 to +200			$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	4.28			$^\circ\text{C}/\text{W}$

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

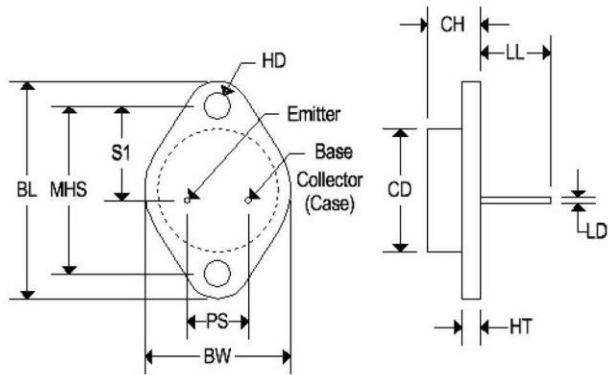
Characteristics	Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS				
Collector-Emitter Sustaining Voltage $I_C = 10\text{mA}$, $I_B = 0$	2N6077 2N6078 2N6079	$V_{CE0(sus)}$	275 250 350	- - - Vdc
Collector-Emitter Saturation Voltage $I_C = 5\text{Adc}$, $I_B = -0.5\text{Adc}$		$V_{CE(sat)}$	-	1.0 Vdc
Collector-Base Saturation Voltage $I_C = 5\text{Adc}$, $I_B = -0.5\text{Adc}$		$V_{BE(sat)}$	-	1.2 Vdc
Collector Cutoff Current $V_{CE} = \text{Rated } V_{CE0}$, $I_B = 0$		I_{CEO}	-	2.0 mAdc
Collector Cutoff Current $V_{CE} = \text{Rated } V_{CE0}$, $V_{BE(off)} = 1.5\text{V}$ $V_{CE} = \text{Rated } V_{CE0}$, $V_{BE(off)} = 1.5\text{V}$, $T_C = 125^\circ\text{C}$		I_{CEO}	- -	0.1 1.0 mAdc
Collector Cutoff Current $V_{CB} = \text{Rated } V_{CBO}$, $I_E = 0$		I_{CBO}	-	0.1 mAdc
Emitter Cutoff Current $V_{EB} = 6\text{Vdc}$, $I_C = 0$		I_{EBO}	-	1.0 mAdc
DC Current Gain $I_C = 1.2\text{Adc}$, $V_{CE} = 1.0\text{Vdc}$		h_{FE}	12	70 -
Transition Frequency $I_C = 500\text{mAdc}$, $V_{CE} = 10\text{Vdc}$, $f = 1\text{MHz}$		f_T	7 (typ) MHz	

2N6077-2N6079

NPN SILICON HIGH POWER TRANSISTORS

MECHANICAL CHARACTERISTICS

Case	TO-66
Marking	Alpha-numeric
Polarity	See below



Dim	TO-66			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	1.205	1.280	30.60	32.50
CD	0.445	0.557	11.303	14.148
CH	0.257	0.284	6.540	7.220
LL	0.374	0.413	9.500	10.50
BW	0.680	0.727	17.26	18.46
LD	0.030	0.036	0.760	0.920
HT	0.054	0.065	1.380	1.650
MHS	0.951	0.976	24.16	24.78
S1	0.545	0.614	13.84	15.60
HD	0.131	0.154	3.320	3.920
PS	0.191	0.210	4.860	5.340