

FEATURES:

- Available as “HR” (high reliability) screened per MIL-PRF-19500, JANTX level. Add “HR” suffix to base part number
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix)

MAXIMUM RATINGS

Ratings	Symbol	2N5758 2N6226	2N5759 2N6227	2N5760 2N6228	Unit
Collector-Base Voltage	V_{CBO}	100	120	140	V
Collector-Emitter Voltage	V_{CEO}	100	120	140	V
Emitter-Base Voltage	V_{EBO}	7			V
Collector Current -Continuous Peak	I_C	6 10			A
Base Current	I_B	4.0			A
Total Power Dissipation	P_D	150			W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +200			°C
Thermal Resistance Junction to case	$R_{\theta JC}$	1.17			°C/W

ELECTRICAL CHARACTERISTICS @ 25°C unless otherwise noted

Characteristics	Symbol	Min	Max	Unit
Collector Base Cutoff Current $V_{CB} = \text{Rated } V_{CB}$	I_{CBO}	-	1.0	mA
Collector Emitter Cutoff Current $V_{CE} = \text{Rated } V_{CB}, V_{EB(off)} = 1.5V$ $V_{CE} = \text{Rated } V_{CB}, V_{EB(off)} = 1.5V, T_C = 150^\circ C$	I_{CEV}	-	1.0 5.0	mA
Collector Emitter Cutoff Current $V_{CE} = \frac{1}{2} \text{ Rated } V_{CEO}$	I_{CEO}	-	1.0	mA
Emitter Base Cutoff Current $V_{BE} = 7V$	I_{EBO}	-	1.0	mA
Collector Base Breakdown Voltage $I_C = 200mA$	BV_{CEO}	100 120 140	- - -	V
Collector-Emitter Saturation Voltage $I_C = 3A, I_B = 0.3A$ $I_C = 6A, I_B = 1.2A$	$V_{CE(sat)}$	- -	1.0 2.0	V
Base-Emitter On-Voltage $V_{CE} = 2.0V, I_C = 3.0A$	$V_{BE(ON)}$	-	1.5	V
DC Current Gain $I_C = 3A, V_{CE} = 2V$	h_{FE}	25 20 15	100 80 60	-
DC Current Gain $I_C = 6A, V_{CE} = 2V$	h_{FE}	5.0 5.0 5.0	- - -	-
Small Signal Current Gain $I_C = 2A, V_{CE} = 10V, f = 1KHz$	h_{fe}	15	-	-

2N5758-2N5760 – NPN 2N6226-2N6228 – PNP

COMPLEMENTARY SILICON POWER TRANSISTORS

ELECTRICAL CHARACTERISTICS @ 25°C unless otherwise noted

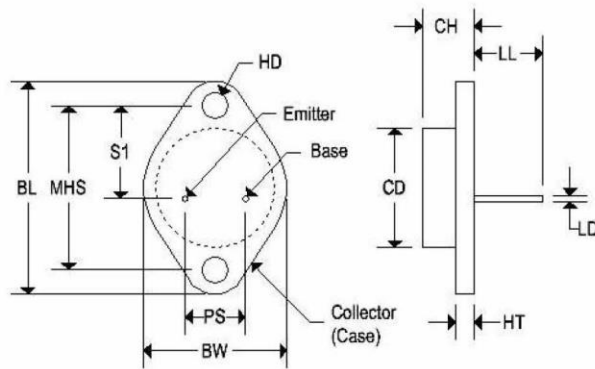
Characteristics	Symbol	Min	Max	Unit
Current Gain – Bandwidth Product ⁽²⁾ $I_C = 0.5A, V_{CE} = 20V, f_{test} = 0.5MHz$	f_T	1	-	MHz
Output Capacitance $V_{CB} = 10V, I_E = 0, f = 100kHz$	C_{ob}	-	300	pF

Note 1: Pulse width = 350 μ s, duty cycle \leq 0.02

Note 2: $f_T = |h_{fe}| \cdot f_{test}$

MECHANICAL CHARACTERISTICS

Case	TO-3
Marking	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	0.060	0.135	1.520	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