

PZT751T1

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

Characteristics	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage (I _C = 10 mA _{dc} , I _B = 0)	V _{(BR)CEO}	60	-	V _{dc}
Collector-Emitter Breakdown Voltage (I _C = 100 μA _{dc} , I _E = 0)	V _{(BR)CBO}	80	-	V _{dc}
Emitter-Base Breakdown Voltage (I _E = 10 μA _{dc} , I _C = 0)	V _{(BR)EBO}	5.0	-	V _{dc}
Base-Emitter Cutoff Current (V _{EB} = 4.0 V _{dc})	I _{EBO}	-	0.1	μA _{dc}
Collector-Base Cutoff Current (V _{CB} = 80 V _{dc} , I _E = 0)	I _{CBO}	-	100	nA _{dc}

ON CHARACTERISTICS (Note 2)

DC Current Gain (I _C = 50 mA _{dc} , V _{CE} = 2.0 V _{dc}) (I _C = 500 mA _{dc} , V _{CE} = 2.0 V _{dc}) (I _C = 1.0 A _{dc} , V _{CE} = 2.0 V _{dc}) (I _C = 2.0 A _{dc} , V _{CE} = 2.0 V _{dc})	h _{FE}	75 75 75 40	- - - -	-
Collector-Emitter Saturation Voltages (I _C = 2.0 A _{dc} , I _B = 200 mA _{dc}) (I _C = 1.0 A _{dc} , I _B = 100 mA _{dc})	V _{CE(sat)}	- -	0.5 0.3	V _{dc}
Base-Emitter Voltages (I _C = 1.0 A _{dc} , V _{CE} = 2.0 V _{dc})	V _{BE(on)}	-	1.0	V _{dc}
Base-Emitter Saturation Voltage (I _C = 1.0 A _{dc} , I _B = 100 mA _{dc})	V _{BE(sat)}	-	1.2	V _{dc}
Current-Gain-Bandwidth (I _C = 50 mA _{dc} , V _{CE} = 5.0 V _{dc} , f = 100 MHz)	f _T	75	-	MHz

2. Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle = 2.0%.

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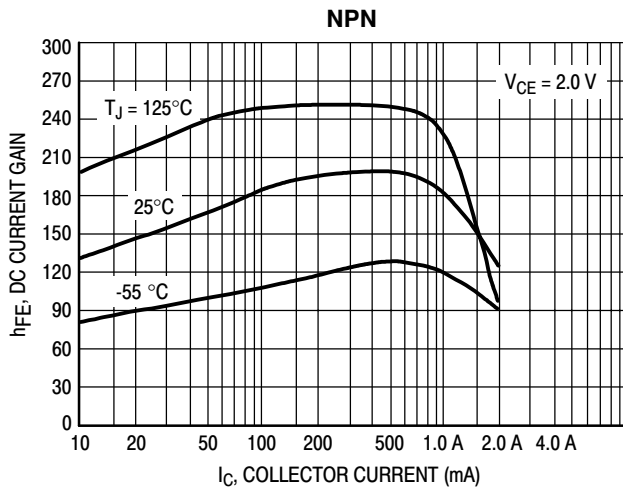


Figure 1. Typical DC Current Gain

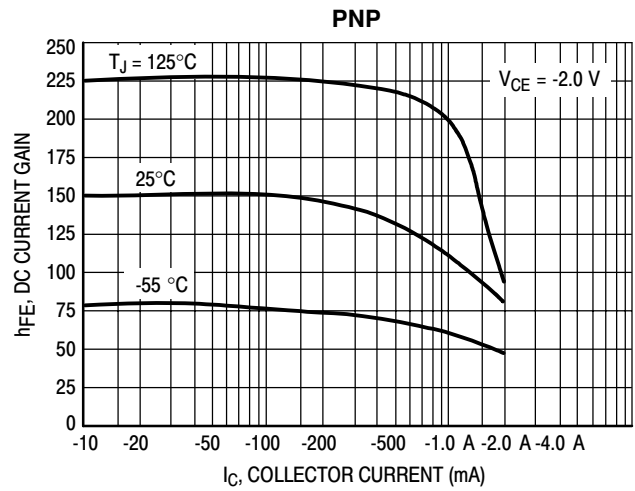


Figure 2. Typical DC Current Gain

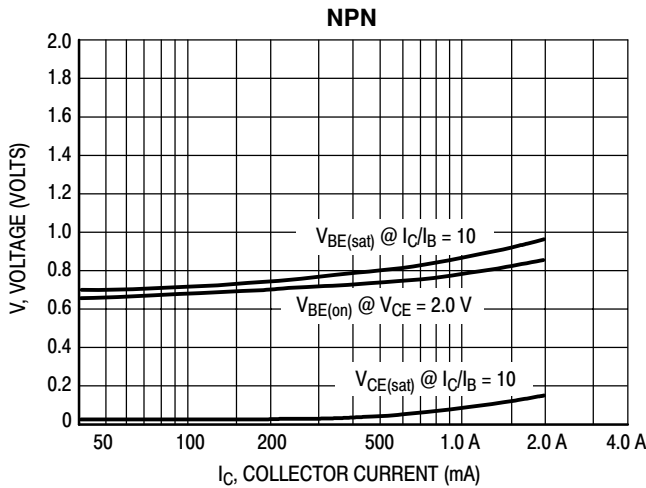


Figure 3. On Voltages

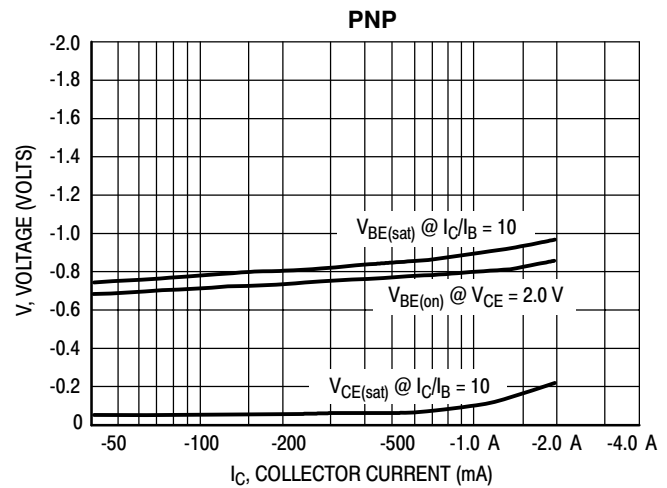


Figure 4. On Voltages

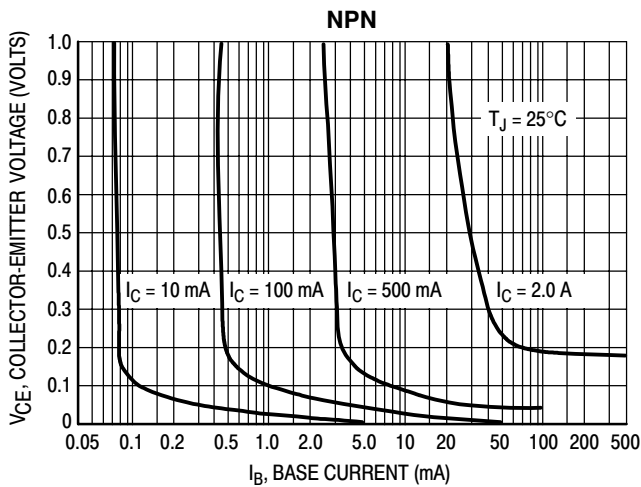


Figure 5. Collector Saturation Region

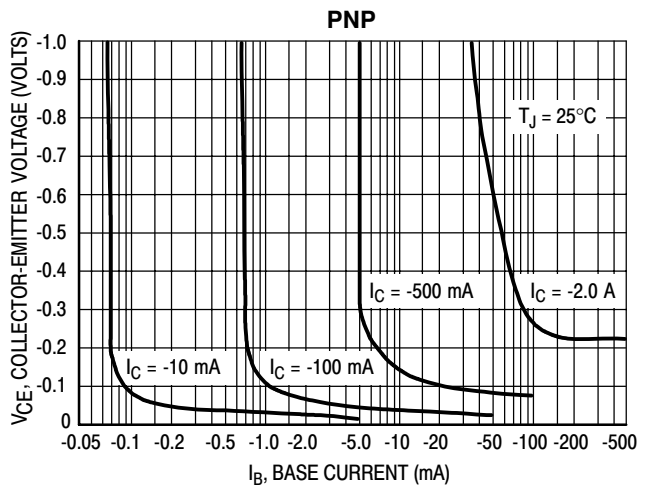
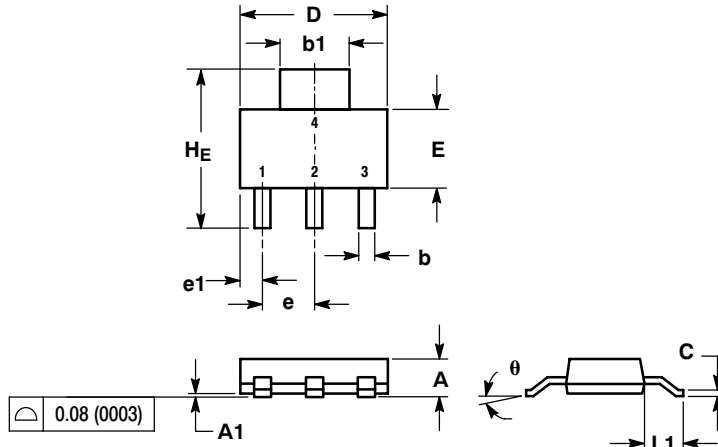


Figure 6. Collector Saturation Region

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PACKAGE DIMENSIONS

SOT-223 (TO-261)
CASE 318E-04
ISSUE L

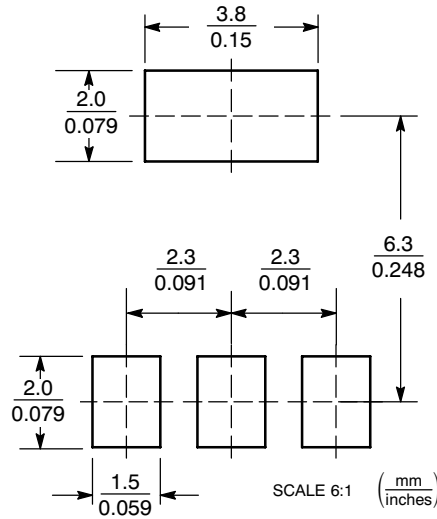


- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.


DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.50	1.63	1.75	0.060	0.064	0.068
A1	0.02	0.06	0.10	0.001	0.002	0.004
b	0.60	0.75	0.89	0.024	0.030	0.035
b1	2.90	3.06	3.20	0.115	0.121	0.126
c	0.24	0.29	0.35	0.009	0.012	0.014
D	6.30	6.50	6.70	0.249	0.256	0.263
E	3.30	3.50	3.70	0.130	0.138	0.145
e	2.20	2.30	2.40	0.087	0.091	0.094
e1	0.85	0.94	1.05	0.033	0.037	0.041
L1	1.50	1.75	2.00	0.060	0.069	0.078
HE	6.70	7.00	7.30	0.264	0.276	0.287
θ	0°	-	10°	0°	-	10°

STYLE 1:
PIN 1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR

SOLDERING FOOTPRINT*



*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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