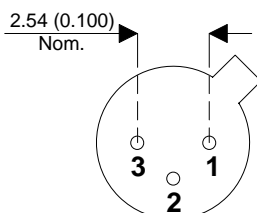
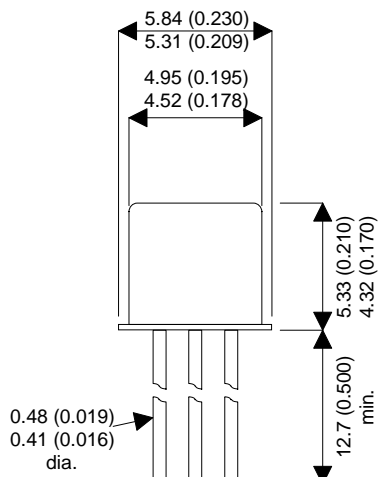


**MECHANICAL DATA**

Dimensions in mm (inches)



**TO-18 METAL PACKAGE**

**Underside View**

PIN 1 – Emitter    PIN 2 – Base    PIN 3 – Collector

**HIGH SPEED  
MEDIUM POWER  
PNP SWITCHING TRANSISTOR**

**FEATURES**

- SILICON PLANAR EPITAXIAL PNP TRANSISTOR
- HIGH SPEED SATURATED SWITCHING
- ALSO AVAILABLE IN CERAMIC SURFACE MOUNT PACKAGE

**ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$  unless otherwise stated)

$V_{CBO}$	Collector - Base Voltage	-60V
$V_{CEO}$	Collector - Emitter Voltage	-60V
$V_{EBO}$	Emitter - Base Voltage	-5V
$I_C$	Collector Current	600mA
$P_D$	Total Device Dissipation @ $T_A = 25^\circ\text{C}$	400mW
	Derate above $25^\circ\text{C}$	2.28mW / $^\circ\text{C}$
$P_D$	Total Device Dissipation @ $T_C = 25^\circ\text{C}$	1.8W
	Derate above $25^\circ\text{C}$	10.3mW / $^\circ\text{C}$
$T_J, T_{STG}$	Operating and Storage Junction Temperature Range	-65 to +200 $^\circ\text{C}$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
<b>OFF CHARACTERISTICS</b>					
$V_{(BR)CEO}^1$	Collector – Emitter Breakdown Voltage	$I_C = 10\text{mA}$ $I_B = 0$	60		V
$V_{(BR)CBO}$	Collector – Base Breakdown Voltage	$I_C = 10\mu\text{A}$ $I_E = 0$	60		V
$V_{(BR)EBO}$	Emitter – Base Breakdown Voltage	$I_E = 10\mu\text{A}$ $I_C = 0$	5		V
$I_{CEX}$	Collector Cut-off Current	$V_{CE} = 30\text{V}$ $V_{BE} = 0.5\text{V}$		50	nA
$I_{CBO}$	Collector Cut-off Current	$I_E = 0$ $V_{CB} = 50\text{V}$ $T_A = 150^\circ\text{C}$		0.01 10	$\mu\text{A}$
$I_B$	Base Current	$V_{CE} = 60\text{V}$ $V_{BE} = 0.5\text{V}$		50	nA
<b>ON CHARACTERISTICS</b>					
$V_{CE(sat)}^1$	Collector – Emitter Saturation Voltage	$I_C = 150\text{mA}$ $I_B = 15\text{mA}$ $I_C = 500\text{mA}$ $I_B = 50\text{mA}$		0.4 1.6	V
$V_{BE(sat)}$	Base – Emitter Saturation Voltage	$I_C = 150\text{mA}$ $I_B = 15\text{mA}^1$ $I_C = 500\text{mA}$ $I_C = 50\text{mA}$	0.6	1.3 2.6	V
$h_{FE}$	DC Current Gain	$I_C = 0.1\text{mA}$ $V_{CE} = 10\text{V}$ $I_C = 1\text{mA}$ $V_{CE} = 10\text{V}$ $I_C = 10\text{mA}$ $V_{CE} = 10\text{V}$ $I_C = 150\text{mA}$ $V_{CE} = 10\text{V}^1$ $I_C = 500\text{mA}$ $V_{CE} = 10\text{V}^1$	75 100 100 100 50		— 300
<b>SMALL SIGNAL CHARACTERISTICS</b>					
$f_T$	Transition Frequency <sup>2</sup>	$I_C = 50\text{mA}$ $f = 100\text{MHz}$ $V_{CE} = 20\text{V}$	200		MHz
$C_{ob}$	Output Capacitance	$V_{CB} = 10\text{V}$ $f = 100\text{kHz}$ $I_E = 0$		8	pF
$C_{ib}$	Input Capacitance	$V_{BE} = 2\text{V}$ $f = 100\text{kHz}$ $I_C = 0$		30	pF
<b>SWITCHING CHARACTERISTICS</b>					
$t_{on}$	Turn-On Time	$V_{CC} = 30\text{V}$		26	ns
$t_d$	Delay Time	$I_C = 150\text{mA}$		6	
$t_r$	Rise Time	$I_{B1} = 15\text{mA}$		20	
$t_{off}$	Turn-Off Time	$V_{CC} = 6\text{V}$		70	ns
$t_s$	Storage Time	$I_C = 150\text{mA}$		50	
$t_f$	Fall Time	$I_{B1} = I_{B2} = 15\text{mA}$		20	

**NOTES:**

- 1) Pulse test:  $t_p \leq 300\mu\text{s}$ ,  $\delta \leq 2\%$
- 2)  $f_T$  is defined as the frequency at which  $h_{FE}$  extrapolates to unity.

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## Part number search for devices beginning "2N2907A-220M-ISO"

[Semelab Home](#)

Datasheets are downloaded as Acrobat PDF files.



### Bipolar Products

PRODUCT	Polarity	Package	$V_{CEO}$	$I_{C(cont)}$	$H_{FE(min)}$	$H_{FE(max)}$	@ $V_{CE}/I_C$	$F_T$	$P_D$
2N2907A-220M-ISO	PNP	TO257AB (TO220M)	60V	0.6A	100	300	10/0.15	200MHz	0.4W

Searched through 3084 records and found 1 products matching your criteria.

[Top of Page](#)

If you are unable to find a suitable part, please [contact us](#).

