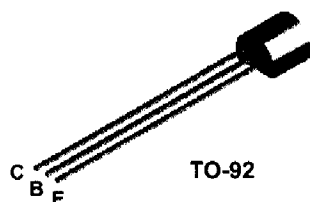


New Jersey Semi-Conductor Products, Inc.

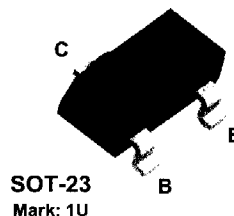
20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

PN2484



MMBT2484



Absolute Maximum Ratings*

TA = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	60	V
V _{CBO}	Collector-Base Voltage	60	V
V _{EB0}	Emitter-Base Voltage	5.0	V
I _C	Collector Current - Continuous	100	mA
T _J , T _{stg}	Operating and Storage Junction Temperature Range	-55 to +150	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

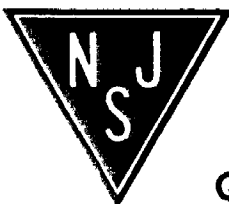
NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

TA = 25°C unless otherwise noted

Symbol	Characteristic	Max		Units
		PN2484	*MMBT2484	
P _D	Total Device Dissipation Derate above 25°C	625 5.0	350 2.8	mW mW/°C
R _{θJC}	Thermal Resistance, Junction to Case	83.3		°C/W
R _{θJA}	Thermal Resistance, Junction to Ambient	200	357	°C/W



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

NPN General Purpose Amplifier

(continued)

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
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OFF CHARACTERISTICS

BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 10\text{ }\mu\text{A}$, $I_B = 0$	60		V
BV_{CEO}	Collector-Emitter Breakdown Voltage*	$I_C = 10\text{ mA}$, $I_E = 0$	60		V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_C = 10\text{ }\mu\text{A}$, $I_E = 0$	5.0		V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 45\text{ V}$, $I_E = 0$ $V_{CB} = 45\text{ V}$, $I_E = 0$, $T_A = 150^\circ\text{C}$		10 10	nA μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5.0\text{ V}$, $I_C = 0$		10	nA

ON CHARACTERISTICS

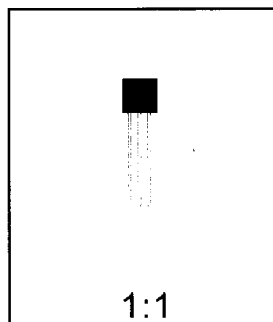
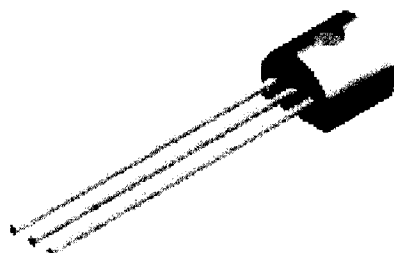
h_{FE}	DC Current Gain	$I_C = 1.0\text{ mA}$, $V_{CE} = 5.0\text{ V}$ $I_C = 10\text{ mA}$, $V_{CE} = 5.0\text{ V}^*$	250	800	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 1.0\text{ mA}$, $I_B = 0.1\text{ mA}$		0.35	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = 1.0\text{ mA}$, $V_{CE} = 5.0\text{ V}$		0.95	V

SMALL SIGNAL CHARACTERISTICS

C_{obo}	Output Capacitance	$V_{CB} = 5.0\text{ V}$, $f = 140\text{ kHz}$		6.0	pF
C_{ibo}	Input Capacitance	$V_{EB} = 0.5\text{ V}$, $f = 140\text{ kHz}$		6.0	pF
NF	Noise Figure	$I_C = 10\text{ }\mu\text{A}$, $V_{CE} = 5.0\text{ V}$, $R_S = 10\text{ k}\Omega$, $f = 1.0\text{ kHz}$, $BW = 200\text{ Hz}$		3.0	dB

* Pulse Test: Pulse Width $\leq 300\text{ }\mu\text{s}$, Duty Cycle $\leq 3.0\%$

TO-92 (FS PKG Code 92, 94, 96)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 0.1977

TO-92 (92,94,96)

PIN	92		94		96	
	B	F	B	F	B	F
1	E	D	E	D	B	S
2	B	S	C	G	E	D
3	C	G	B	S	C	G

