

Silicon PNP Power Transistors

MJE15033

DESCRIPTION

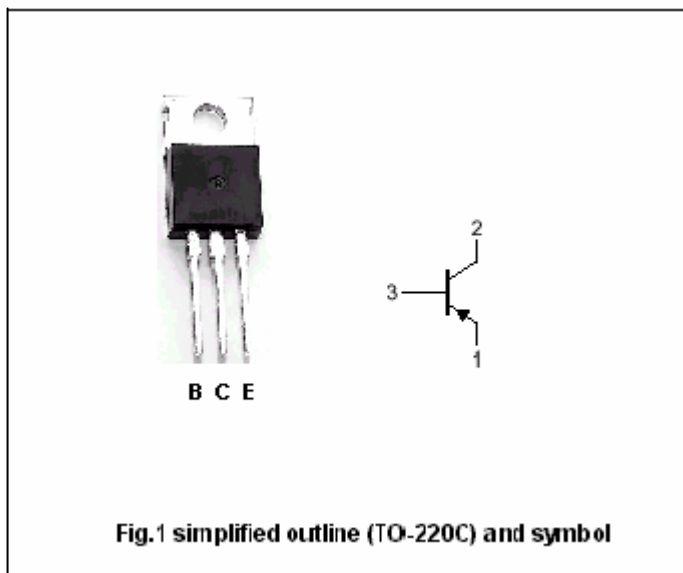
- With TO-220C package
- Complement to type MJE15032
- High transition frequency
- DC Current Gain Specified to 5.0 Amperes
 - $h_{FE} = 50$ (Min) @ $I_C = -0.5$ Adc
 - $h_{FE} = 10$ (Min) @ $I_C = -2.0$ Adc

APPLICATIONS

- Designed for use as high-frequency drivers in audio amplifiers.

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

ABSOLUTE MAXIMUM RATINGS($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-250	V
V_{CEO}	Collector-emitter voltage	Open base	-250	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-8	A
I_{CM}	Collector current-Peak		-16	A
I_B	Base current		-2	A
P_D	Total power dissipation	$T_a=25^\circ\text{C}$	2	W
		$T_C=25^\circ\text{C}$	50	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-C}$	Thermal resistance ; junction to case	2.5	$^\circ\text{C}/\text{W}$
$R_{th\ j-A}$	Thermal resistance , junction to ambient	62.5	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

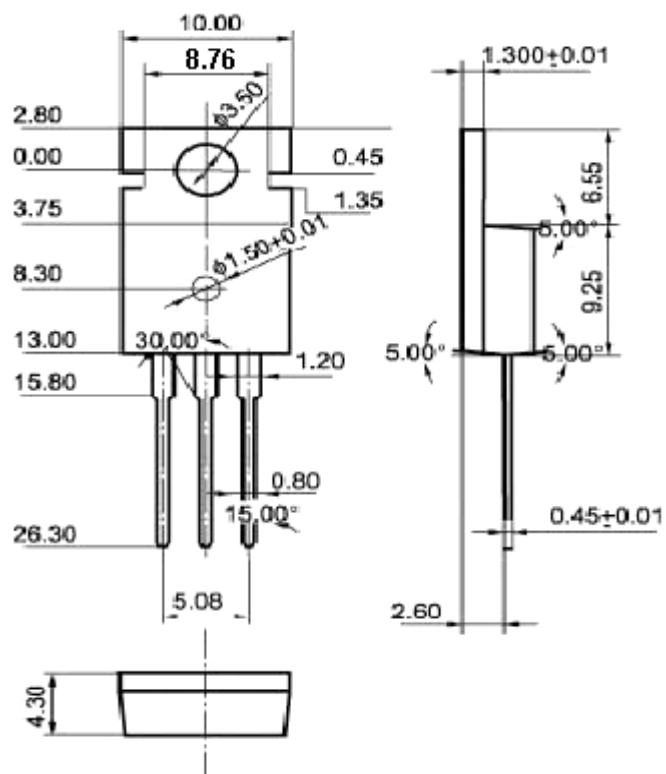
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C = -10mA ; I_B = 0$	-250			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -1A ; I_B = -0.1A$			-0.5	V
V_{BE}	Base-emitter on voltage	$I_C = -1A ; V_{CE} = -5V$			-1.0	V
I_{CBO}	Collector cut-off current	$V_{CB} = -150V ; I_E = 0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V ; I_C = 0$			-10	μA
h_{FE-1}	DC current gain	$I_C = -0.5A ; V_{CE} = -5V$	50			
h_{FE-2}	DC current gain	$I_C = -1A ; V_{CE} = -5V$	50			
h_{FE-3}	DC current gain	$I_C = -2A ; V_{CE} = -5V$	10			
f_T	Transition frequency	$I_C = -0.5A ; V_{CE} = -10V ; f = 1.0MHz$	30			MHz

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)