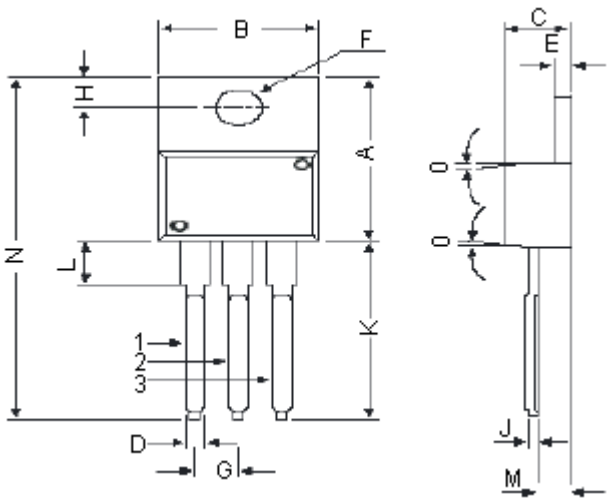
MJE15032

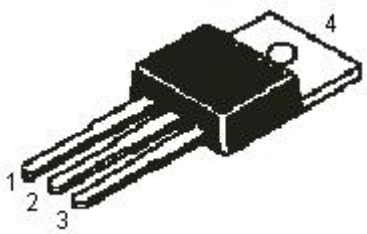
Power Transistor

Features:

- High power complimentary pairs.
- For high quality audio output stages, and general purpose push-pull amplifier configurations.
- Silicon epitaxial fabrication power transistors.
- High - frequency drivers in audio amplifier.

TO-220 Plastic Package





Dimensions	Minimum	Maximum
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	-	0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	-	0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N	-	31.24
O	7°	

Dimensions : Millimetres

Pin Configuration:

1. Base
2. Collector
3. Emitter
4. Collector

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Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	250	V
Collector Emitter Voltage	V_{CEO}		
Emitter Base Voltage	V_{EBO}	5	
Collector Current Continuous Peak	I_C	8 16	A
Base Current	I_B	2	
Power Dissipation T_C = 25ºC Derate Above 25ºC	P_D	50 0.4	W W/°C
Power Dissipation T_A = 25ºC Derate Above 25ºC	P_D	2 0.016	
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +150	°C

Thermal Resistance

Thermal Ambient	$R_{th\ (j\text{-}a)}$	62.5	°C/W
Junction to Case	$R_{th\ (j\text{-}c)}$	2.5	

Electrical Characteristics (T_C = 25ºC unless specified otherwise)

Parameter	Symbol	Test Condition	Minimum	Maximum	Unit
Collector Emitter Sustaining Voltage	$V_{CEO\ (sus)}$*	I_C = 10mA, I_B = 0	250	-	V
Collector Cut off Current	I_{CBO}	V_{CB} = 150V, I_E = 0	-	10	µA
Emitter Cut off Current	I_{EBO}	V_{BE} = 5V, I_C = 0	-		
DC Current Gain	h_{FE}*	I_C = 0.5A, V_{CE} = 5V I_C = 1.0A, V_{CE}= 5V I_C = 2A, V_{CE} = 5V	50 50 10	-	-
Collector Emitter Saturation Voltage	$V_{CE\ (sat)}$*	I_C = 1A, I_B = 0.1A	-	0.5	V
Base Emitter On Voltage	$V_{BE\ (on)}$*	I_C = 1.0A, V_{CE} = 5V	-	1.0	
Dynamic Characteristics					
Current Gain-Bandwidth Product	f_T **	I_C = 500mA, V_{CE} = 10V f_{test} = 1MHz	30	-	MHz

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

**f_T = | h_{fe} | • f_{test}.

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Specifications

$I_{C\ (av)}$ Maximum (A)	V_{CEO} Maximum (V)	h_{FE} Minimum at I_C = 1A	P_D at 25°C (W)	Package	Type	Part Number
1	250	50	50	TO-220	NPN	MJE15032

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Power Transistor

Notes:

International Sales Offices:

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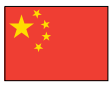

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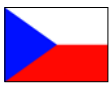

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