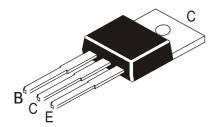


TÜV MANAGEMENT SERVICE

An ISO/TS16949 and ISO 9001 Certified Company

SILICON EPITAXIAL POWER TRANSISTORS



MJE15032 NPN MJE15033 PNP

TO - 220 Plastic Package

High - Frequency Drivers in Audio Amplifier

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT	
Collector- Base Voltage	V _{CBO}	250	V	
Collector- Emitter Voltage	V _{CEO}	250	V	
Emitter- Base Voltage	V _{EBO}	5	V	
Collector Current Continuous	Ic	8	А	
Peak		16		
Base Current	I _B	2	Α	
Power Dissipation T _C =25°C	P _D	50	W	
Derate Above 25°C		0.4	W/ºC	
Power Dissipation T _A =25°C	P _D	2	W	
Derate Above 25°C		0.016	W/°C	
Operating & Storage Junction	T _{j, Tstg}	- 65 to +150	°C	
Temperature Range	,, .,			

Thermal Resistance

Thermal Ambient	R _{th (j-a)}	62.5	°C/W
Junction to Case	R _{th (j-c)}	2.5	°C/W

ELECTRICAL CHARACTERISTICS (Tc=25° C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector- Emitter Sustaing Voltage	$V_{CEO(sus)^*}$	$I_C=10$ mA, $I_B=0$	250	-	-	V
Collector Cut Off Current	I _{CBO}	$V_{CB} = 150V, I_{E} = 0$	1	•	10	μΑ
Emitter Cut Off Current	I _{EBO}	$V_{BE}=5V$, $I_{C}=0$	-	-	10	μΑ
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	-	-	
		$I_C=1.0A$, $V_{CE}=5V$	50	-	-	
		$I_C=2A$, $V_{CE}=5V$	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	V

Dynamic Characteristics

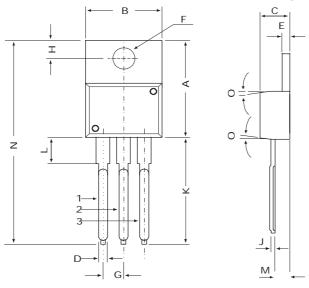
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Current Gain - Bandwidth Product	f _{T **}	I_C =500mA, V_{CE} =10V	30	-	-	MHz		
	`	f _{test} =1MHz						

^{*} Pulse Test: Pulse Width < 300ms, Duty Cycle <2 %

^{**} $f_T = Ih_{fe}I. f_{test}$.

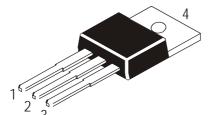
TO - 220 Plastic Package

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DIM	MIN	MAX		
А	14.42	16.51		
В	9.63	10.67		
С	3.56	4.83		
D	_	0.90		
E	1.15	1.40		
F	3.75	3.88		
G	2.29	2.79		
Н	2.54	3.43		
J	_	0.56		
K	12.70	14.73		
L	2.80	4.07		
М	2.03	2.92		
N	_	31.24		
0	7 DEG			

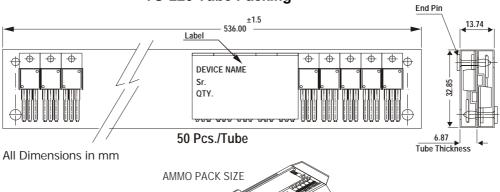
All diminsions in mm.

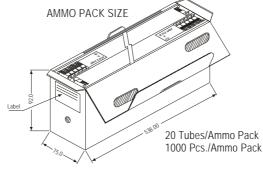


Pin Configuration

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

TO-220 Tube Packing





Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	GrWt
TO-220	200 pcs/polybag	396 gm/200 pcs	3" x 7.5" x 7.5"	1K	17" x 15" x 13.5"	16K	36 kgs
	50 pcs/tube	135 gm/50 pcs	3.5" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	28 kgs

Notes

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TO - 220 Plastic Package

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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