



SILICON POWER COMPLEMENTRY TRANSISTORS



PNP NPN MJ4030 MJ4033 MJ4031 MJ4034 MJ4032 MJ4035

TO-3 Metal Can Package

Designed for use as output devices in complementary general purpose amplifier applications

FEATURES

• High Gain Darlington Performance

CHARACTERISTICS	SYMBOL	MJ4030 MJ4033	MJ4031 MJ4034	MJ4032 MJ4035	UNIT
Collector – Emitter Voltage	$V_{\scriptscriptstyleCEO}$	60	80	100	V
Collector – Base Voltage	$V_{\scriptscriptstyle{CBO}}$	60	80	100	V
Emitter – Base Voltage	V _{EBO}	5.0		V	
Collector Current – Continuous	I _c	16		А	
- Peak	I _{CM}	20			
Base Current	I _B	0.5		Α	
Total Power Dissipation @ T _c =25°C	D	150			W
Derate above 25°C	$P_{\scriptscriptstyle D}$	0.857			W/ºC
Operating and Storage Junction Temperature Range	T_{J},T_{STG}	-65 to 200		°C	

THERMAL CHARACTERISTICS

CHARACTER	SYMBOL	MAX	UNIT
Thermal Resistance Junction to Case	$R_{_{\theta jc}}$	1.17	°C/W





ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	S	SYMBOL	MIN	MAX	UNIT
OFF CHARACTERISTICS		'			
Collector – Emitter Sustaining Voltage (1)					
(I _C =100mA , I _B =0)					
MJ4030	, MJ4033	V _{CEO(sus)}	60		V
MJ4031	, MJ4034		80		
MJ4032	, MJ4035		100		
Collector Cutoff Current					
(V _{CE} =30V , I _B =0) MJ4030	, MJ4033			3.0	mA
(V _{CE} =40V , I _B =0) MJ4031	, MJ4034	I _{CEO}		3.0	
(V _{CE} =50V , I _B =0) MJ4032	, MJ4035			3.0	
Emitter – Cutoff Current		ı			A
$(V_{EB} = 5.0 \text{ V}, I_{C} = 0)$		l _{EBO}		5.0	mA
ON CHARATERISTICS (1)					
DC Current Gain		h			
(I _C =10A, V _{CE} =3.0V)		h _{FE}	1000		
Collector – Emitter Saturation Voltage					
(I _C =10A, I _B =40mA)		V _{CE(sat)}		2.5	V
I _C =16A, I _B =80mA)				4.0	V
Base-Emitter On Voltage		V			
(I _C =10A, V _{CE} =3.0V)		V _{BE(on)}		3.0	V

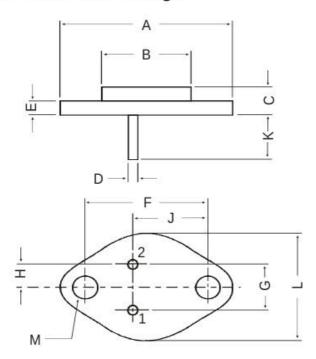
Note: 1. Pulse Test: Dulse width = 300 μs , Duty Cycle $\leq 2.0\%$





TO-3 PACKAGE OUTLINE AND DIMENSIONS

TO-3 Metal Can Package



	В	W
	С	6.35
	D	0.96
	Е	_
	F	29.90
	G	10.69
	Н	5.20
	J	16.64
	K	11.15
	L	_
	М	3.84
-		

DIM

MIN.

MAX.

39.37 22.22

8.50

1.09

30.40

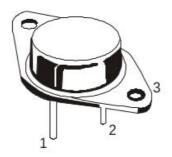
11.18

5.72

17.15 12.25

26.67 4.19

All dimensions in mm.



PIN CONFIGURATION

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR





Customer Notes:

Component Disposal Instructions

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

DICLAIMER

The product information and the selection guides facilitate selection of the CDIL's 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 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).



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