PNP MJ4030 – MJ4031 – MJ4032

MEDIUM POWER COMPLEMENTARY SILICON TRANSISTORS

They are silicon epitaxial-base PNP power transistors in monolithic Darlington configuration and are mounted in Jedec TO-3 metal case.
They are intented for use as output devices in complementary general purpose amplifier applications.
The complementary NPN types are the MJ4033, MJ4034, MJ4035
Compliance to RoHS

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
V_{CBO}	Collector-Base Voltage	I_E=0	MJ4030	-60	V
			MJ4031	-80	
			MJ4032	-100	
V_{CEO}	Collector-EmitterVoltage	I_B=0	MJ4030	-60	V
			MJ4031	-80	
			MJ4032	-100	
V_{EBO}	Emitter-Base Voltage	I_C=0	MJ4030	-5.0	V
			MJ4031		
			MJ4032		
I_C	Collector Current			-16	A
I_B	Base Current			-0.5	A
P_T	Power Dissipation	@ T_C < 25°		150	W
T_J	Junction Temperature			200	°C
T_s	Storage Temperature			-65 to +200	

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-C}	Thermal Resistance, Junction to Case	1.17	°C/W

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
V_{CEO}	Collector-Emitter Voltage (*)	I_C=-100 mA, I_B=0	MJ4030	-60	-	-	V
			MJ4031	-80	-	-	
			MJ4032	-100			
I_{CEO}	Collector Cutoff Current	V_{CE}=-30 Vdc, I_B=0	MJ4030	-	-	-3.0	mA
		V_{CE}=-40 Vdc, I_B=0	MJ4031	-	-		
		V_{CE}=-50 V, I_B=0	MJ4032	-	-		
I_{EBO}	Emitter Cutoff Current	V_{BE}=-5.0 V, I_C=0	MJ4030	-	-	-5.0	mA
			MJ4031				
			MJ4032				
I_{CER}	Collector-Emitter Leakage Current	V_{CB}=-60 V R_{BE}=1.0 kΩ	MJ4030	-	-	-1.0	mA
		V_{CB}=-80 V R_{BE}=1.0 kΩ	MJ4031	-	-		
		V_{CB}=-100 V R_{BE}=1.0 kΩ	MJ4032				
		V_{CB}=-60 V R_{BE}=1.0 kΩ T_C=150°C	MJ4030	-	-	-5.0	
		V_{CB}=-80 V R_{BE}=1.0 kΩ T_C=150°C	MJ4031	-	-		
		V_{CB}=-100 V R_{BE}=1.0 kΩ T_C=150°C	MJ4032				
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	I_C=-10 A I_B=-40 mA	MJ4030	-	-	-2.5	V
			MJ4031				
			MJ4032				
		I_C=-16 A I_B=-80 mA	MJ4030	-	-	-4.0	
			MJ4031				
			MJ4032				
V_{BE}	Base-Emitter Voltage (*)	I_C=-10 A V_{CE}=-3.0V	MJ4030	-	-	-3	V
			MJ4031				
			MJ4032				
h_{FE}	DC Current Gain (*)	V_{CE}=-10 V I_C=-3.0 A	MJ4030	1000	-	-	-
			MJ4031				
			MJ4032				

(*) Pulse Width ≈ 300 μs, Duty Cycle ∠ 2.0%

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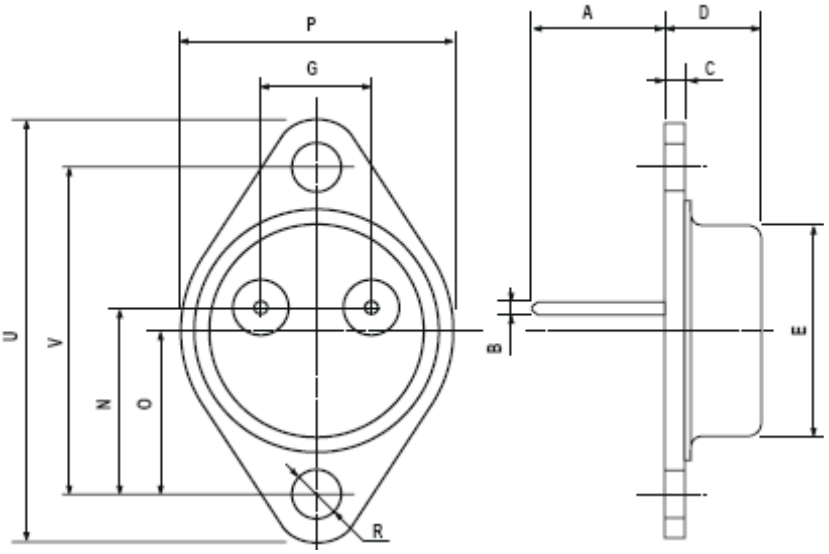
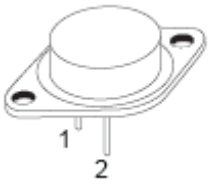
MECHANICAL DATA CASE TO-3

DIMENSIONS (mm)		
	min	max
A	11	13.10
B	0.97	1.15
C	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
N	16.50	17.20
P	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30



Pin 1 :	Base
Pin 2 :	Emitter
Case :	Collector



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