



MJ2955

PNP SILICON POWER TRANSISTORS

The MJ2955 is a silicon Planar Epitaxial NPN transistor in Jedec TO-3 metal case. Designed for general purpose, moderate speed, switching and amplifier applications Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit	
V_{CBO}	Collector to Base Voltage	-100	V	
V_{CEO}	#Collector-Emitter Voltage	-60	V	
V_{CER}	Collector-Emitter Voltage	-70	V	
V_{EBO}	Emitter-Base Voltage	-7	V	
V_{CB}	Collector-Base Voltage	-100	V	
V_{EB}	Emitter-Base Voltage	-7	V	
I_C	Collector Current – Continuous	-15	A	
I_B	Base Current – Continuous	-7	A	
P_D	Total Device Dissipation	@ $T_C = 25^\circ$	115	W
		Derate above 25°	0.657	W/ $^\circ C$
T_J	Junction Temperature	200	$^\circ C$	
T_S	Storage Temperature	-65 to +200	$^\circ C$	

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJC}	Thermal Resistance, Junction to Case	1.52	$^\circ C/W$

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

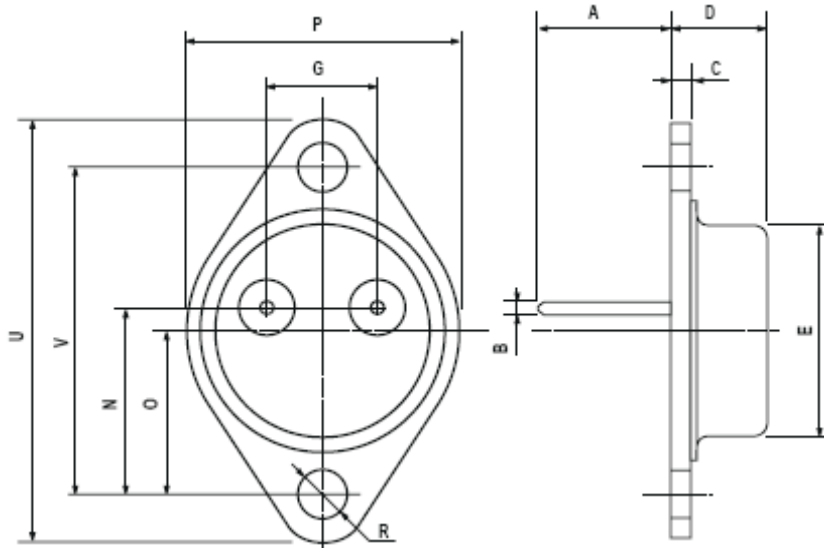
Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage (*)	$I_C = -200 \text{ mA}, I_B = 0$	-60	-	-	V
V_{CER}	Collector-Emitter Breakdown Voltage (*)	$I_C = -200 \text{ mA}, R_{BE} = 100\Omega$	-70	-	-	V
I_{CEO}	Collector-Emitter Current	$V_{CE} = -30 \text{ V}, I_B = 0$	-	-	-0.7	mA
I_{CEX}	Collector Cutoff Current	$V_{CE} = -100 \text{ V}, V_{EB(off)} = -1.5 \text{ V}$	-	-	-1	mA
		$V_{CE} = -100 \text{ V}, V_{EB(off)} = -1.5 \text{ V}$ $T_C = 150 \text{ }^\circ\text{C}$	-	-	-5	
I_{EBO}	Emitter Cutoff Current	$V_{BE} = -7 \text{ V}, I_C = 0$	-	-	-5	mA
h_{FE}	DC Current Gain	$I_C = -4 \text{ A}, V_{CE} = -4 \text{ A}$	20	-	70	-
		$I_C = -10 \text{ A}, V_{CE} = -4 \text{ A}$	5	-	-	
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage	$I_C = -4 \text{ A}, I_B = -400 \text{ mA}$	-	-	-1.1	V
		$I_C = -10 \text{ A}, I_B = -3.3 \text{ A}$	-	-	-3	
V_{BE}	Base-Emitter Voltage	$I_C = -4 \text{ A}, V_{CE} = -4 \text{ V}$	-	-	-1.5	V
f_T	Transition Frequency	$V_{CE} = -10 \text{ V}, I_C = -0.5 \text{ A}$ $f = 1 \text{ MHz}$	2.5	-	-	kHz
$I_{s/b}$	Second Breakdown Collector Current	$t = 1 \text{ S (non repetitive)}$	-2.87	-	-	A

In accordance with JEDEC Registration Data
 (*) Pulse Width $\approx 300 \mu\text{s}$, Duty Cycle $\angle 2.0\%$

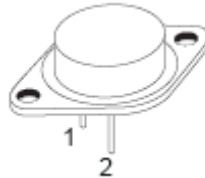
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MECHANICAL DATA CASE TO-3

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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