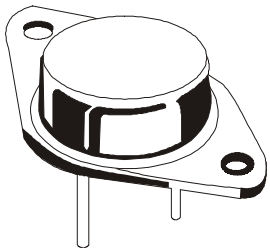
SILICON PLANAR POWER TRANSISTORS

2N3055 NPN
MJ2955 PNP



TO-3
Metal Can Package

General Purpose Switching and Amplifier Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	60	V
Collector Emitter Voltage(R_{BE}=100Ω)	V_{CER}	70	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current Continuous	I_C	15	A
Base Current	I_B	7	A
Power Dissipation @ T_c=25ºC Derate Above 25ºC	P_{tot}	115 0.657	W W/ºC
Operating And Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200	ºC

THERMAL RESISTANCE

Junction to Case	$R_{th(j-c)}$	1.52	ºC/W

ELECTRICAL CHARACTERISTICS (T_C=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Sustaing Voltage	$V_{CEO(sus)}$*	I_C=200mA, I_B=0	60		V
Collector Emitter Sustaing Voltage	$V_{CER(sus)}$*	I_C=200mA, R_{BE}=100Ω	70		V
Collector Cut Off Current	I_{CEX}	V_{CE}=100V, V_{BE}=(off)=1.5V T_c=150ºC V_{CE}=100V, V_{BE}=(off)=1.5V		1.0 5.0	mA
Collector Cut Off Current	I_{CEO}	V_{CE}=30V, I_B=0		0.7	mA
Emitter Cut Off Current	I_{EBO}	V_{BE}=7V, I_C=0		5.0	mA
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$*	I_C=4A, I_B=400mA I_C=10A, I_B=3.3A		1.1 3.0	V
Base Emitter on Voltage	$V_{BE(on)}$*	I_C=4A, V_{CE}=4V		1.5	V
DC Current Gain	h_{FE}*	I_C=4A, V_{CE}=4V I_C=10A, V_{CE}=4V	20 5	70	

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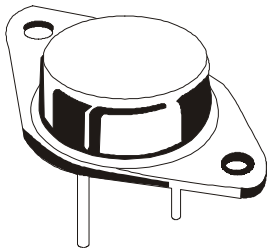


TO-3
Metal Can Package

ELECTRICAL CHARACTERISTICS (T_C=25ºC unless specified otherwise)

Second Breakdown

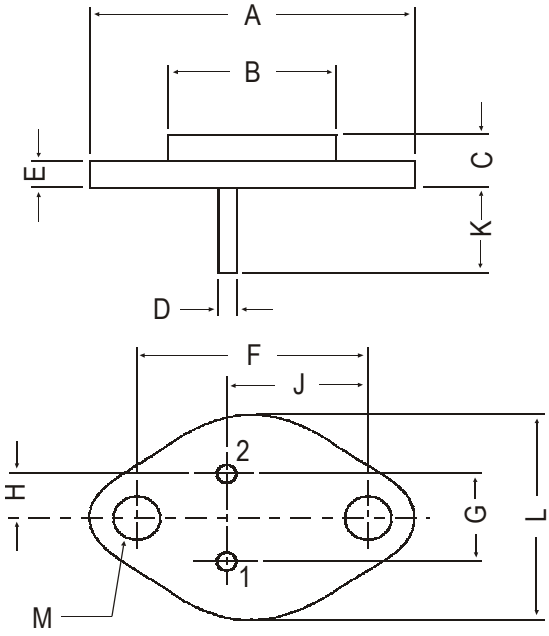
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Second Breakdown Collector Current with Base Forward Biased	I_S/b	V_{CE}=40V,t=1.0 s,Nonrepetitive	2.87		A

Dynamic Characteristics

Current Gain - Bandwidth Product	f_T	I_C=0.5A, V_{CE}=10V, f=1MHz	2.5		MHz
Small Signal Current Gain	h_{fe}	I_C=1A, V_{CE}=4V, f=1KHz	15	120	
Small Signal Current Gain Cutoff Frequency	$^fh_{fe}$	I_C=1A, V_{CE}=4V, f=1KHz	10		KHz

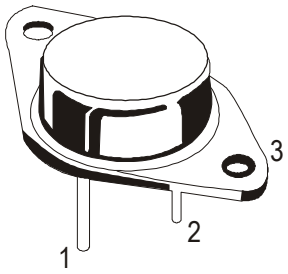
***Pulse Test: Pulse Width ≤300μs, Duty Cycle ≤2%**

TO-3 Metal Can Package



All dimensions in mm.

DIM	MIN.	MAX.
A	—	39.37
B	—	22.22
C	6.35	8.50
D	0.96	1.09
E	—	1.77
F	29.90	30.40
G	10.69	11.18
H	5.20	5.72
J	16.64	17.15
K	11.15	12.25
L	—	26.67
M	3.84	4.19



PIN CONFIGURATION
1. BASE
2. EMITTER
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs

Disclaimer

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