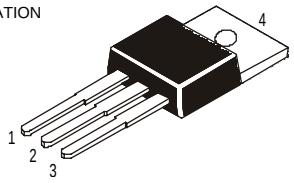
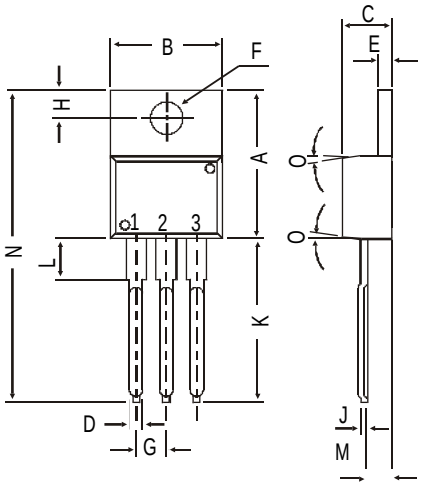
TO-220 Plastic Package **MJE2955T, MJE3055T**

MJE2955T PNP PLASTIC POWER TRANSISTOR
MJE3055T NPN PLASTIC POWER TRANSISTOR
General Purpose Amplifier and Switching Applications

PIN CONFIGURATION
1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR





All diminsions in mm.

DIM	MIN.	MAX.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D		0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J		0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N		31.24
O	DEG 7	

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)	V_{CBO}	*max.*	*70 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*60 V*
Collector current	I_C	*max.*	*10 A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*75 W*
Junction temperature	T_j	*max.*	*150 °C*
Collector-emitter saturation voltage			
I_C = 4 A; I_B = 0.4 A	V_{CEsat}	*max.*	*1.1 V*
D.C. current gain			
I_C = 4 A; V_{CE} = 4 V	h_{FE}	*min*	*20*
		max.	*100*

RATINGS *(at T_A=25°C unless otherwise specified)*

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*70 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*60 V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*	*5.0 V*

Collector current	I_C	*max.*	*10 A*
Base current	I_B	*max.*	*6 A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*75 W*
Derate above 25°C		*max.*	*0.6 W/°C*
Junction temperature	T_j	*max.*	*150 °C*
Storage temperature	T_{stg}	*–65 to +150*	*°C*

THERMAL RESISTANCE

From junction to case	$R_{th\ j-c}$	=	*1.67 °C/W*

CHARACTERISTICS

T_{amb} = 25°C unless otherwise specified

Collector cutoff current			
I_E = 0; V_{CB} = 70V	I_{CBO}	*max.*	*1.0 mA*
I_E = 0; V_{CB} = 70V; T_C = 150°C	I_{CBO}	*max.*	*10 mA*
$V_{EB(off)}$ = 1.5V; V_{CE} = 70V	I_{CEX}	*max.*	*1.0 mA*
$V_{EB(off)}$ = 1.5V; V_{CE} = 70V; T_C = 150°C	I_{CEX}	*max.*	*5.0 mA*
I_B = 0; V_{CE} = 30V	I_{CEO}	*max.*	*0.7 mA*
Emitter cut-off current			
I_C = 0; V_{EB} = 5V	I_{EBO}	*max.*	*5 mA*
Breakdown voltages			
I_C = 200 mA; I_B = 0	$V_{CEO(sus)}$*	*min.*	*60 V*
I_C = 1 mA; I_E = 0	V_{CBO}	*min.*	*70 V*
I_E = 1 mA; I_C = 0	V_{EBO}	*min.*	*5.0 V*
Saturation voltages			
I_C = 4 A; I_B = 0.4 A	V_{CEsat}*	*max.*	*1.1 V*
I_C = 10 A; I_B = 3.3 A	V_{CEsat}*	*max.*	*8.0 V*
Base-emitter on voltage			
I_C = 4A; V_{CE} = 4V	$V_{BE(on)}$*	*max.*	*1.8 V*
D.C. current gain			
I_C = 4A; V_{CE} = 4V	h_{FE}*	*min.*	*20*
		max.	*100*
I_C = 10A; V_{CE} = 4V	h_{FE}*	*min.*	*5*
Transition frequency			
I_C = 0.5A; V_{CE} = 10V; f = 500 KHz	f_T	*min.*	*2.0 MHz*

** Pulse test: pulse width ≤ 300 µs; duty cycle ≤ 2%.*

Notes

Disclaimer

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CDIL is a registered Trademark of
Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290
e-mail sales@cdil.com www.cdil.com