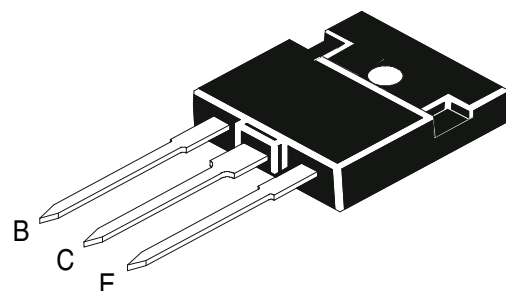


POWER TRANSISTORS



TIP2955F PNP
TIP3055F NPN

TO- 3P Fully Isolated
Plastic Package

Designed for General Purpose Switching and Amplifier Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CEO}	60	V
Collector-Emitter Voltage	V_{CER}	70	V
Collector-Base Voltage	V_{CB}	100	V
Emitter-Base Voltage	V_{EB}	7.0	V
Collector Current - Continuous	I_C	15	A
Base Current	I_B	7.0	A
Total Power Dissipation upto $T_c=25^\circ\text{C}$	P_D	90	W
Derate above 25°C		0.72	W/ $^\circ\text{C}$
Operating And Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +150	$^\circ\text{C}$

THERMAL RESISTANCE

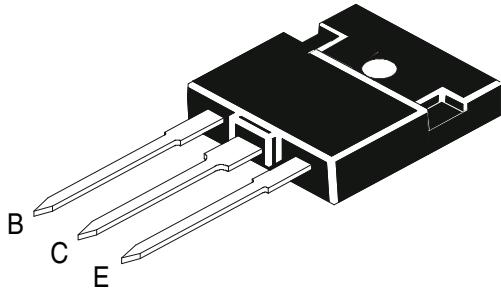
From Junction to case	$R_{th(jc)}$	1.39	$^\circ\text{C/W}$
From Junction to Ambient	$R_{th(ja)}$	35.7	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}^*$	$I_C = 30\text{ mA}, I_B = 0$	60			V
Collector Cutoff Current	I_{CER}	$V_{CE}=70\text{V}, R_{BE}=100\Omega$			1.0	mA
Collector Cutoff Current	I_{CEO}	$V_{CE} = 30\text{ V}, I_B = 0$			0.7	mA
Collector Cutoff Current	I_{CEV}	$V_{CE}=100\text{V}, V_{BE(off)} = 1.5\text{ V}$			5.0	mA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = 7.0\text{ V}, I_C = 0$			5.0	mA
DC Current Gain	h_{FE}^*	$I_C = 4.0\text{ A}, V_{CE} = 4.0\text{ V}$ $I_C = 10\text{ A}, V_{CE} = 4.0\text{ V}$	20 5.0		70	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}^*$	$I_C = 4.0\text{ A}, I_B = 400\text{ mA}$ $I_C = 10\text{ A}, I_B = 3.3\text{ A}$			1.1 3.0	V
Base-Emitter On Voltage	$V_{BE(on)}^*$	$I_C = 4.0\text{ A}, V_{CE} = 4.0\text{ V}$			1.8	V

Second Breakdown

Second Breakdown Collector Current with Base Forward Biased	$I_{S/b}$	$V_{CE} = 30\text{ V}, t = 1.0\text{s},$ Nonrepetitive	3.0			A
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TIP2955F PNP
TIP3055F NPN

**TO- 3P Fully Isolated
Plastic Package**

ELECTRICAL CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ unless specified otherwise)

Dynamic Characteristics

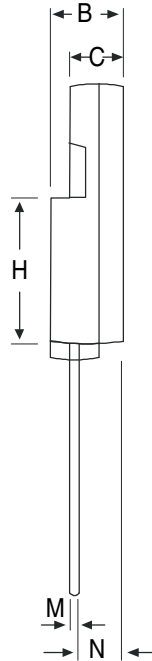
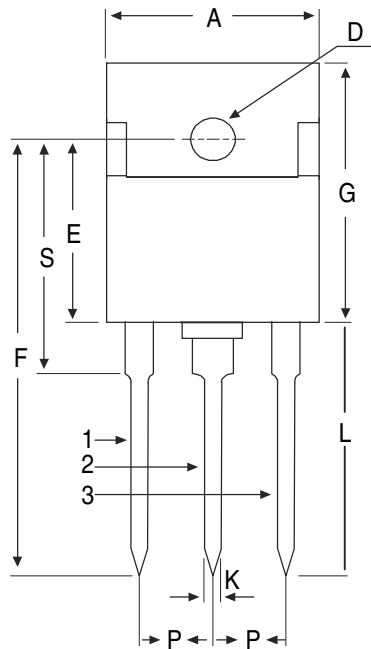
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Current Gain - Bandwidth Product	f_T	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=1.0\text{MHz}$	2.5			MHz
Small-Signal Current Gain	h_{fe}	$V_{CE}=4.0\text{ V}, I_C=1.0\text{ A}, f=1.0\text{KHz}$	15			

* Pulse test: Pulse Width $\approx 300\mu\text{s}$; Duty cycle $\leq 2.0\%$.

TIP2955F PNP
TIP3055F NPN

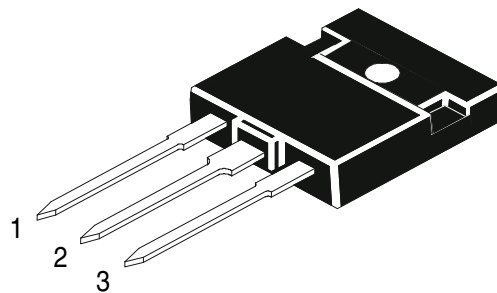
TO- 3P Fully Isolated
Plastic Package

TO-3P (TO-218) Plastic Package



DIM	MIN	MAX
A	15.80	16.40
B	5.20	5.70
C	3.80	4.20
D	Ø 3.30	Ø 3.60
E	14.50	15.10
F	33.25	36.75
G	20.75	21.25
H	11.50	12.25
K	1.00	1.30
L	18.75	21.65
M	0.40	0.60
N	3.15	3.45
P	5.21	5.72
S	18.75	19.25

All diminsions in mm.



Pin Configuration

1. Base
2. Collector
3. Emitter

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/ Qty	Size	Qty	Size	Qty	Gr Wt
TO-3P	100 pcs/polybag	628 gm/100 pcs	3" x 7.5" x 7.5"	0.3K	17" x 15" x 13.5"	4.8K	42 kgs

Disclaimer

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