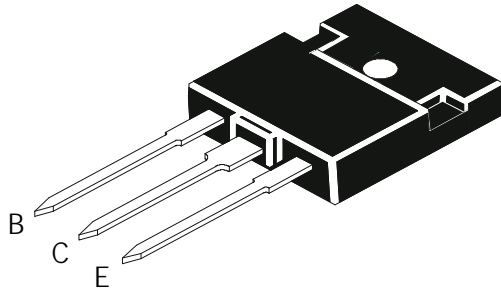


## POWER TRANSISTORS

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 $T_c=25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	90 0.72	W W/°C
Operating And Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +150	°C

### THERMAL RESISTANCE

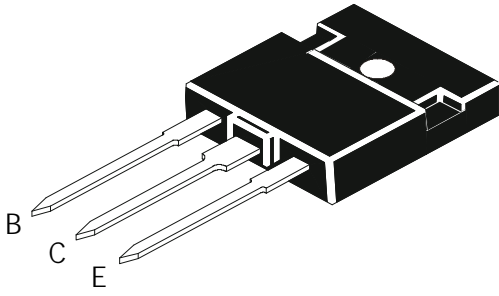
From Junction to case	$R_{th(jc)}$	1.39	°C/W
From Junction to Ambient	$R_{th(ja)}$	35.7	°C/W

### 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**

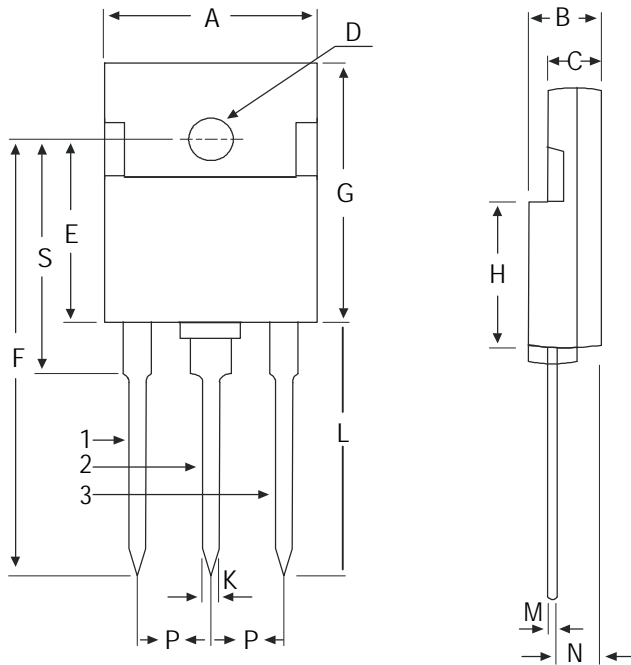
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Current Gain - Bandwidth Product	$f_T$	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=1.0\text{MHz}$	2.5			MHz
Small-Signal Current Gain	$h_{fe}$	$V_{CE}=4.0\text{ V}, I_C=1.0\text{ A}, f=1.0\text{KHz}$	15			

\* Pulse test: Pulse Width =300ms ; Duty cycle  $\leq$  2.0%.

**TIP2955F PNP**  
**TIP3055F NPN**

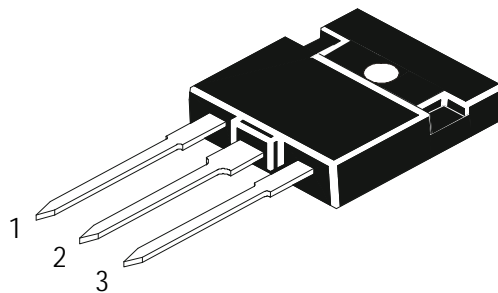
**TO- 3P Fully Isolated**  
**Plastic Package**

**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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