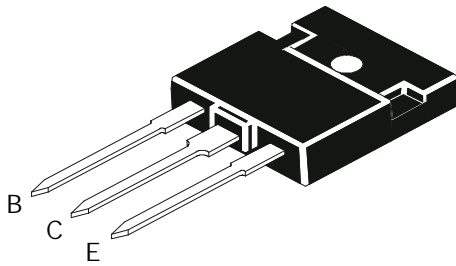


**POWER TRANSISTORS**



TIP35F, AF, BF, CF NPN  
TIP36F, AF, BF, CF PNP

TO- 3PF Fully Isolated  
Plastic Package

**For General Purpose Power Amplifier and Switching Applications.**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	TIP35F	TIP35AF	TIP35BF	TIP35CF	UNIT
		TIP36F	TIP36AF	TIP36BF	TIP36CF	
Collector Emitter Voltage	$V_{CEO}$	40	60	80	100	V
Collector Base Voltage	$V_{CBO}$	40	60	80	100	V
Emitter Base Voltage	$V_{EBO}$	5.0				V
Collector Current Continuous	$I_C$	25				A
Collector Current Peak	$I_{CM}$	40				A
Base Current Continuous	$I_B$	5.0				A
Collector Power Dissipation at $T_c=25^\circ\text{C}$	$P_C$	125				W
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	- 65 to +150				$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

Thermal Resistance, Junction to Case	$R_{th(j-c)}$	1.0	$^\circ\text{C/W}$
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**ELECTRICAL CHARACTERISTICS ( $T_j=25^\circ\text{C}$  unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining Voltage	$*V_{CEO(sus)}$	$I_C=30\text{mA}, I_B=0$				
		<b>TIP35F/TIP36F</b>	40			V
		<b>TIP35AF/TIP36AF</b>	60			V
		<b>TIP35BF/TIP36BF</b>	80			V
		<b>TIP35CF/TIP36CF</b>	100			V
Collector Emitter Cut Off Current	$I_{CEO}$	$V_{CE}=30\text{V}, I_B=0$				
		<b>TIP35AF/TIP36AF</b>			1.0	mA
Collector Emitter Cut Off Current	$I_{CES}$	$V_{CE}=60\text{V}, I_B=0$				
		<b>TIP35BF/CF, TIP36BF/CF</b>			1.0	mA
Collector Emitter Cut Off Current	$I_{CES}$	$V_{CE}=\text{Rated } V_{CEO}, V_{EB}=0$			0.7	mA
Emitter Base Cut Off Current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			1.0	mA
DC Current Gain	$*h_{FE}$	$I_C=1.5\text{A}, V_{CE}=4\text{V}$	25			
		$I_C=15\text{A}, V_{CE}=4\text{V}$	15		75	
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=15\text{A}, I_B=1.5\text{A}$			1.8	V
		$I_C=25\text{A}, I_B=5\text{A}$			4.0	V
Base Emitter On Voltage	$*V_{BE(on)}$	$I_C=15\text{A}, V_{CE}=4\text{V}$			2.0	V
		$I_C=25\text{A}, V_{CE}=4\text{V}$			4.0	V
Transition Frequency	$f_T$	$I_C=1\text{A}, V_{CE}=10\text{V}$	3.0			MHz

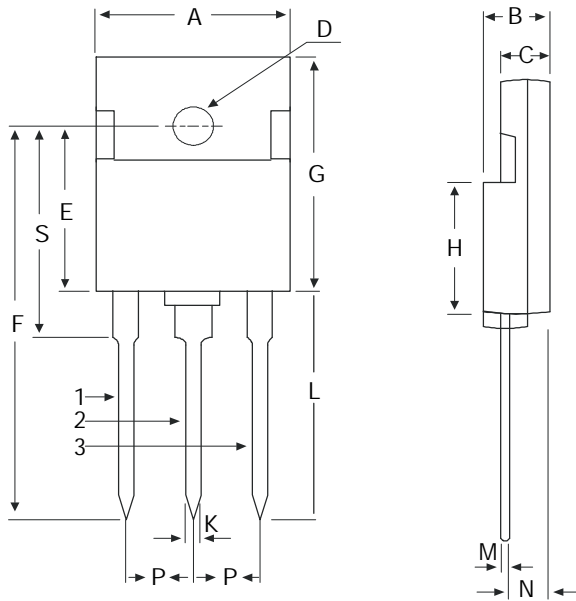
\*Pulse test: Pulse width 300ms, Duty cycle  $\leq 2\%$

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TIP35F, AF, BF, CF NPN  
TIP36F, AF, BF, CF PNP

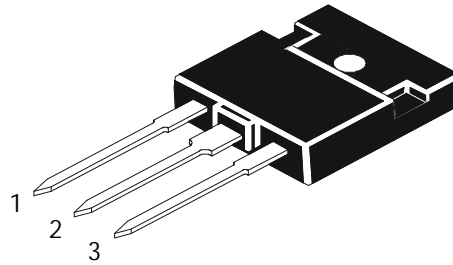
TO- 3PF Fully Isolated  
Plastic Package

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 dimensions 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

TIP35F\_36FRev041007E

**Component Disposal Instructions**

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

**Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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