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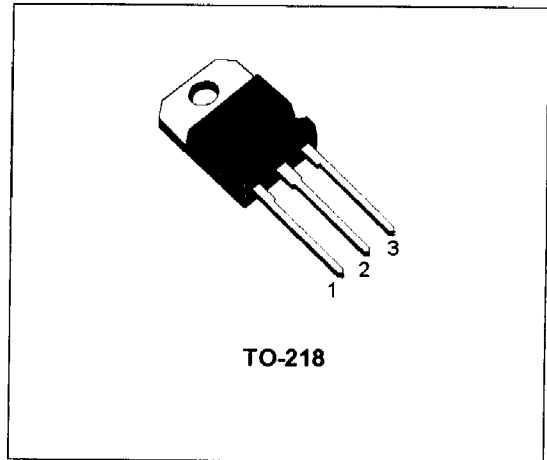
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**TIP35C
 TIP36B/TIP36C**

DESCRIPTION

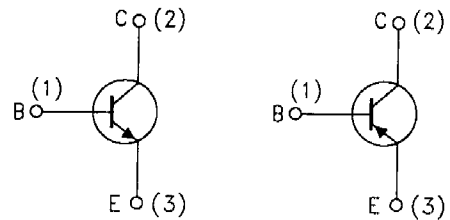
The TIP35C is a silicon Epitaxial-Base NPN transistor mounted in TO-218 plastic package. It is intended for use in power amplifier and switching applications.

The complementary PNP type is TIP36C.
 Also TIP36B is a PNP type.



TO-218

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value		Unit
		NPN	TIP35C	
		PNP	TIP36C	
V _{CB0}	Collector-Base Voltage (I _E = 0)	80	100	V
V _{CEO}	Collector-Emitter Voltage (I _B = 0)	80	100	V
V _{EBO}	Emitter-Base Voltage (I _C = 0)	5		V
I _C	Collector Current	25		A
I _{CM}	Collector Peak Current	50		A
I _B	Base Current	5		A
P _{tot}	Total Dissipation at T _{case} ≤ 25 °C	125		W
T _{stg}	Storage Temperature	-65 to 150		°C
T _J	Max. Operating Junction Temperature	150		°C

For PNP types voltage and current values are negative.



NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

THERMAL DATA

$R_{thj-case}$	Thermal Resistance Junction-case	Max	1	$^{\circ}C/W$
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CEO}	Collector Cut-off Current ($I_B = 0$)	$V_{CE} = 60 V$			1	mA
I_{EBO}	Emitter Cut-off Current ($I_C = 0$)	$V_{EB} = 5 V$			1	mA
I_{CES}	Collector Cut-off Current ($V_{BE} = 0$)	$V_{CE} = \text{Rated } V_{CEO}$			0.7	mA
$V_{CEO(sus)}^*$	Collector-Emitter Sustaining Voltage ($I_B = 0$)	$I_C = 30 \text{ mA}$ for TIP36B for TIP35C/36C	80 100			V V
h_{FE}^*	DC Current Gain	$I_C = 1.5 A$ $V_{CE} = 4 V$ $I_C = 15 A$ $V_{CE} = 4 V$	25 10		50	
$V_{CE(sat)}^*$	Collector-Emitter Saturation Voltage	$I_C = 15 A$ $I_B = 1.5 A$ $I_C = 25 A$ $I_B = 5 A$			1.8 4	V
$V_{BE(on)}^*$	Base-Emitter Voltage	$I_C = 15 A$ $V_{CE} = 4 V$ $I_C = 25 A$ $V_{CE} = 4 V$			2 4	V V
f_T	Transition Frequency	$I_C = 1 A$ $V_{CE} = 10 V$ $f = 1 \text{ MHz}$	3			MHz
h_{fe}	Small Signal Current Gain	$I_C = 1 A$ $V_{CE} = 10 V$ $f = 1 \text{ KHz}$	25			

* Pulsed: Pulse duration = 300 μs , duty cycle $\leq 2\%$
For PNP types voltage and current values are negative.

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	4.7		4.9	0.185		0.193
C	1.17		1.37	0.046		0.054
D		2.5			0.098	
E	0.5		0.78	0.019		0.030
F	1.1		1.3	0.043		0.051
G	10.8		11.1	0.425		0.437
H	14.7		15.2	0.578		0.598
L2	-		16.2	-		0.637
L3		18			0.708	
L5	3.95		4.15	0.155		0.163
L6		31			1.220	
R	-		12.2	-		0.480
Ø	4		4.1	0.157		0.161

