

TIP35C TIP36B/TIP36C COMPLEMENTARY SILICON HIGH POWER

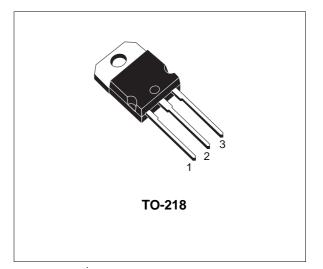
TRANSISTORS

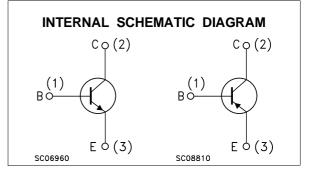
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DESCRIPTION

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

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





ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value			Unit	
	NPN			TIP35C		
		PNP	TIP36B	TIP36C		
V _{CBO}	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 $(I_C = 0)$		Ę	5	V	
Ic	Collector Current		2	Α		
Ісм	Collector Peak Current		5	Α		
IB	Base Current		5		А	
P _{tot}	Total Dissipation at $T_{case} \le 25 \ ^{\circ}C$		125		W	
T _{stg}	Storage Temperature		-65 to 150		°C	
Tj	Max. Operating Junction Temperature		1:	°C		

For PNP types voltage and current values are negative.

THERMAL DATA

ELECTRICAL CHARACTERISTICS ($T_{case} = 25 \, {}^{\circ}C$ unless otherwise specified)

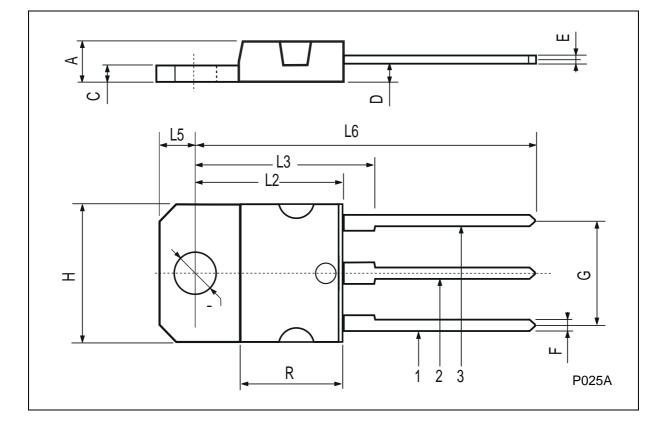
Symbol	Parameter	Test Conditions		Min.	Тур.	Max.	Unit
I _{CEO}	Collector Cut-off Current ($I_B = 0$)	V _{CE} = 60 V				1	mA
I _{EBO}	Emitter Cut-off Current $(I_C = 0)$	V _{EB} = 5 V				1	mA
I _{CES}	Collector Cut-off Current (V _{BE} = 0)	V_{CE} = Rated V_{CEO}				0.7	mA
$V_{CEO(sus)}^{\star}$	Collector-Emitter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

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

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DIM.		mm			inch	
Divi.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
А	4.7		4.9	0.185		0.193
С	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
Н	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





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