

TIP35C TIP36B/36C

COMPLEMENTARY SILICON HIGH POWER TRANSISTORS

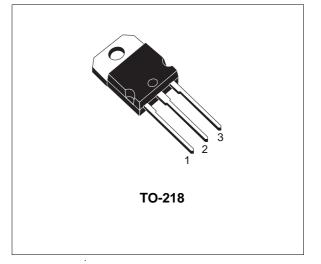
SGS-THOMSON PREFERRED SALESTYPE

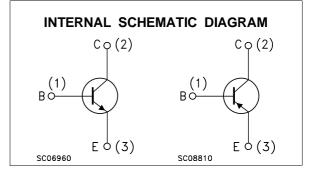
DESCRIPTION

The TIP35C is a silicon epitaxial-base NPN transistors in TO-218 plastic package. It is intented for use in power amplifier and switching applications.

TIP36B is a silicon PNP transistor.

The complementary PNP type for TIP35C is TIP36C.





ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter		Value		
		NPN		TIP35C	
		PNP	TIP36B	TIP36C	
V _{СВО}	Collector-Base Voltage (I _E = 0)		80	100	V
Vceo	Collector-Emitter Voltage (I _B = 0)		80	100	V
V _{EBO}	Emitter-Base Voltage (I _C = 0)		5		V
lc	Collector Current		25		А
I _{CM}	Collector Peak Current		50		Α
Ι _Β	Base Current		:	Α	
P _{tot}	Total Dissipation at $T_{case} \le 25$ °C		125		W
T _{stg}	Storage Temperature		-65 to 150		°C
Ti	Max. Operating Junction Temperature		1;	°C	

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THERMAL DATA

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

Symbol	Parameter	Test Conditions		Min.	Тур.	Max.	Unit
Ісво	Collector Cut-off Current ($I_B = 0$)	V _{CB} = 60 V				1	mA
I _{EBO}	Emitter Cut-off Current $(I_C = 0)$	V _{EB} = 5 V				1	mA
ICES	Collector Cut-off Current (V _{BE} = 0)	V_{CE} = Rated V_{CEO}				0.7	mA
$V_{CEO(sus)}^{*}$	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⊤	Transition Frequency	I _C = 1 A f = 1 MHz	V _{CE} = 10 V	3			MHz
h _{fe}	Small Signal Current Gain	I _C = 1 A f = 1 KHz	V _{CE} = 10 V	25			

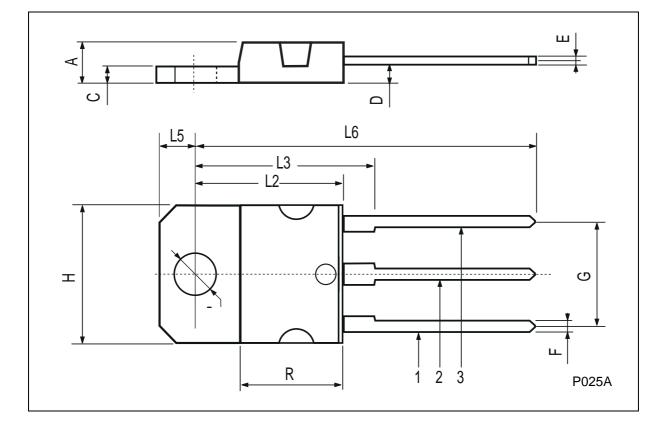
* Pulsed: Pulse duration = $300 \,\mu$ s, duty cycle $\leq 2 \,\%$

For PNP types voltage and current values are negative.



DIM.		mm			inch	
	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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