SILICON HIGH- POWER TRANSISTOR
PNP TIP36A/B/C
25A 125W

Technical Data

…designed for use in general-purpose switching and power amplifier applications.

- ☞ DC Current Gain - h_{FE} = 15(Min) @ I_C = 15 Adc
- ☞ 25 A Collecter Current
- ☞ TO-218 Package

MAXIMUM RATINGS

Rating	Symbol	TIP36A	TIP36B	TIP36C	Unit
Collector- Emitter Voltage	V_{CEO}	60	80	100	Vdc
Collector – Base Voltage	V_{CB}	60	80	100	Vdc
Emitter Base Voltage	V_{EB}	5			Vdc
Collector Current – Continuos Peak	I_C	25 40			Adc
Base Current	I_B	5			Adc
Total Power Dissipation @ TC = 25°C Derate above 25°C	PD	125 1			Watts W/°C
Operating and Storage junction Temperature Range	Tj,Tstg	-65 to +150			°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Thermal resistance junction to case	R_{thjc}	1.0	°C/W

ELECTRICAL CHARACTERISTICS :[Tc = 25 °C unless otherwise noted]

Characteristic	Symbol	Min	Typ	Max	Unit
*** OFF CHARACTERISTICS :**					
Collector–Emitter Sustaining Voltage(1) [Ic =30 mAdc, I_B = 0] TIP36A TIP36B TIP36C	$V_{CEO(sus)}$	 60 80 100			Vdc
Collector Cutoff Current [V_{CE} = 30 Vdc, I_B = 0] TIP36A TIP36B,TIP36C	I_{CE0}			 1.0 1.0	mAdc
Collector Cutoff Current [V_{CE} =Rated V_{CEO},V_{BE} = 0]	I_{CES}			700	✪Adc
Emitter –Base Cutoff Current [V_{EB} =5.0 Vdc , Ic = 0]	I_{EBO}			1	mAdc
*** ON CHARACTERISTICS (1):**					
DC Current Gain [Ic = 1.5 Adc , V_{CE} = 4.0 Vdc] [Ic = 15Adc , V_{CE} = 4.0 Vdc]	h_{FE}	 25 15		 --- 75	
Collector-Emitter Saturation Voltage [Ic = 15Adc , I_B = 1.5Adc] [Ic = 25Adc , I_B = 5.0Adc]	$V_{CE(sat)}$			 1.8 4.0	Vdc
Base-Emitter on Voltage [Ic =15.0 Adc , V_{CE}= 4V] [Ic =25.0 Adc , V_{CE}= 4.0V]	$V_{BE(on)}$			 2.0 4.0	Vdc
DYNAMIC CHARACTERISTICS :					
Current Gain – Bandwidth Product [Ic=1Adc,V_{CE}=10Vdc,ftest=1.0 MHz]	f_T	3			MHz
Small-Signal Current Gain [I_C= 1 Adc, V_{CE}=10 Vdc, f=1kHz]	hfe	25			

· (1) Pulse Test : Pulse Width <300μs , Duty Cycle < 2.0%