

Silicon PNP Power Transistors

T-33-21

TIP34
TIP34A
TIP34B
TIP34C

TOP-3 Package

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	TIP34	TIP34A	TIP34B	TIP34C	Unit
Collector-Base Voltage	-V _{CB0}	40	60	80	100	V
Collector-Emitter Voltage	-V _{CE0}	40	60	80	100	V
Emitter-Base Voltage	-V _{EB0}	5				V
Collector Current	-I _C	10				A
Peak Collector Current	-I _{CM}	15				A
Power Dissipation (T _C =25°C)	P _C	80				W
Junction Temperature	T _J	-65~+150				°C
Storage Temperature	T _{stg}	-65~+150				°C

Applications:

- Power Amplifier and High Speed Switching
- Complementary pair with TIP33, TIP33A, TIP33B, TIP33C

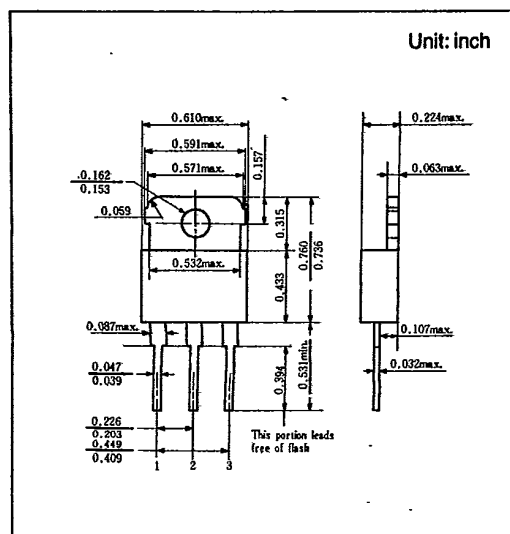
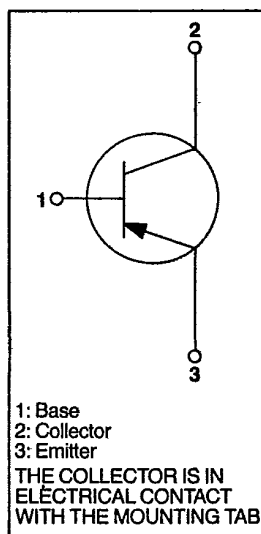
Features:

- 80W at 25°C case temperature
- 10A rated collector current
- Min. fr of 3MHz at 10V, 500mA

Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	TIP34		TIP34A		TIP34B		TIP34C		Unit
			min.	max.	min.	max.	min.	max.	min.	max.	
Collector-Emitter Voltage	-V _{CE0}	-I _C =30mA, I _B =0	40		60		80		100		V
Collector Cutoff Current	-I _{CEO}	-V _{CE} =30V, I _B =0		0.7		0.7					mA
		-V _{CE} =60V, I _B =0						0.7		0.7	
Collector Cutoff Current	-I _{CES}	-V _{CE} =40V, V _{BE} =0		0.4							mA
		-V _{CE} =60V, V _{BE} =0				0.4					
		-V _{CE} =80V, V _{BE} =0					0.4				
		-V _{CE} =100V, V _{BE} =0						0.4			
DC Current Gain	h _{FE}	-V _{CE} =4V, -I _C =1A	40		40		40		40		
		-V _{CE} =4V, -I _C =3A	20	100	20	100	20	100	20	100	
Base-Emitter Voltage	-V _{BE}	-V _{CE} =4V, -I _C =3A		1.6		1.6					V
		-V _{CE} =4V, -I _C =10A		3		3				3	
Collector-Emitter Saturation Voltage	-V _{CE(sat)}	-I _C =3A, -I _B =0.3A		1		1				1	V
		-I _C =10A, -I _B =2.5A		4		4				4	
Small-Signal Current Gain	h _{fe}	-V _{CE} =10V, -I _C =0.5A, f=1kHz	20		20		20		20		
		-V _{CE} =10V, -I _C =0.5A, f=1MHz	3		3		3		3		
Turn-on Time	t _{on}	-I _C =6A, -I _{B1} =0.6A, I _{B2} =0.6A	0.4 (typ.)								μs
Turn-off Time	t _{off}	V _{CE(off)} =4V, R _L =5Ω	0.8 (typ.)								μs

The device specifications are subject to change without prior notice.



TIP34
TIP34A
TIP34B
TIP34C

Typical Characteristics

