

isc Silicon NPN Power Transistors

TIP54

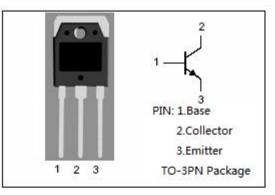
DESCRIPTION

- DC Current Gain -h_{FE} = 30~150@ I_C= 0.3A
- Collector-Emitter Sustaining Voltage-
 - : V_{CEO(SUS)} = 400V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Designed for line operated audio output amplifier,and switching power supply drivers applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)



SYMBOL	PARAMETER	VALUE	UNIT			
V _{CBO}	Collector-Base Voltage	500	v			
V _{CEO}	Collector-Emitter Voltage	400	v			
V _{EBO}	Emitter-Base Voltage	5	v			
Ιc	Collector Current-Continuous	3.0	А			
I _{CM}	Collector Current-Peak	5.0	А			
lв	Base Current	0.6	А			
PD	Collector Power Dissipation Tc=25℃	100	w			
Tj	Junction Temperature	150	°C			
T _{stg}	Storage Temperature Range	-65~150	°C			
THERMAL CHARACTERISTICS						

PARAMETER

Thermal Resistance, Junction to Case

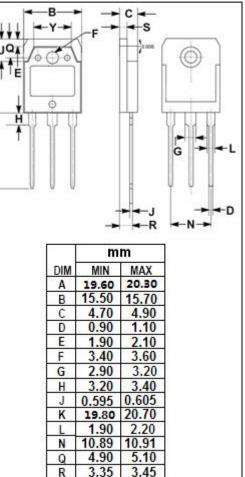
MAX

1.25

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UNIT

°C/W



isc website: <u>www.iscsemi.com</u>

SYMBOL

Rth j-c

isc & iscsemi is registered trademark

S

U

Y

1 995

5.90

9.90

2.100

6.20

10.10



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ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 30mA; I _B = 0	400		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.6A		1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3A; V _{CE} = 10V		1.5	V
І _{сво}	Collector Cutoff Current	V _{CB} = 500V; I _E = 0		1.0	mA
Iceo	Collector Cutoff Current	V _{CE} = 300V; I _B = 0		1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		1.0	mA
h _{FE-1}	DC Current Gain	I _C = 0.3A; V _{CE} = 10V	30	150	
h _{FE-2}	DC Current Gain	I _C = 3A; V _{CE} = 10V	10		
f⊤	Current-Gain—Bandwidth Product	I _C = 0.2A; V _{CE} = 10V	2.5		MHz

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2