



**SILICON POWER TRANSISTOR
PNP TIP2955
15A 90W**

Technical Data

...designed for general-purpose switching and amplifier application.

- ☞ DC Current Gain - $h_{FE} = 20 - 70 @ I_C = 4A_{dc}$
- ☞ Collector-Emitter Saturation Voltage – $V_{CE(sat)} = 1.1 V_{dc} (Max) @ I_C = 4A_{dc}$
- ☞ Excellent Safe Operating Area
- ☞ TO-218 Package

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector- Emitter Voltage	V_{CEO}	60	Vdc
Collector- Emitter Voltage	V_{CER}	70	Vdc
Collector – Base Voltage	V_{CB}	100	Vdc
Emitter Base Voltage	V_{EB}	7	Vdc
Collector Current – Continuous	I_C	15	Adc
Base Current – Continuous	I_B	7	Adc
Total Power Dissipation @ $T_C = 25^\circ C$ Derate above $25^\circ C$	PD	90 0.72	Watts W/ $^\circ C$
Operating and Storage junction Temperature Range	T_j, T_{stg}	-65 to +150	$^\circ C$

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Thermal resistance junction to case	R_{thjc}	1.39	$^\circ C/W$



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

Characteristic	Symbol	Min	Typ	Max	Unit
* OFF CHARACTERISTICS :					
Collector–Emitter Sustaining Voltage (1) [I _c = 30 mAdc, I _B = 0]	V _{CEO(sus)}	60			Vdc
Collector Cutoff Current [V _{CE} = 70 Vdc, R _{BE} = 100ohms]	I _{CER}			1.0	mAdc
Collector Cutoff Current [V _{CE} = 30 Vdc, I _B = 0]	I _{CE0}			0.70	mAdc
Collector Cutoff Current [V _{CE} = 100 Vdc, V _{BE(off)} = 1.5 Vdc]	I _{CEV}			5.0	mAdc
Emitter-Base Cutoff Current [V _{BE} = 7.0 Vdc , I _c = 0]	I _{EBO}			5.0	mAdc
* ON CHARACTERISTICS (1):					
DC Current Gain [I _c = 4.0 Adc , V _{CE} = 4.0 Vdc] [I _c = 10 Adc , V _{CE} = 4.0 Vdc]	h _{FE}	20 5.0		70	
Collector-Emitter Saturation Voltage [I _c = 4.0 Adc , I _B = 400 mAdc] [I _c = 10 Adc , I _B = 3.3 Adc]	V _{CE(sat)}			1.1 3.0	Vdc
Base-Emitter on Voltage [I _c = 4.0 Adc , V _{CE} = 4.0 V _{dc}]	V _{BE(on)}			1.8	Vdc
SECOND BREAKDOWN					
Second Breakdown Collector current With Base Forward Biased [V _{CE} =30 Vdc, t = 1.0 s Nonrepetitive]	1s/b	3			Adc
DYNAMIC CHARACTERISTICS :					
Current Gain – Bandwidth Product [I _c = 0.5Adc , V _{CE} =10 Vdc , f=1.0 MHz]	f _T	2.5			MHz
Small Signal Current Gain [I _C = 1.0 Adc, V _{CE} =4.0 Vdc, f=1.0kHz]	h _{fe}	15			

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