

TRANSISTOR (NPN)

FEATURES

- High Power Gain
- Recommended for FM IF, OSC Stage and AM CONV. IF Stage.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	35	V
V _{CE0}	Collector-Emitter Voltage	30	V
V _{EB0}	Emitter-Base Voltage	4	V
I _C	Collector Current -Continuous	50	mA
P _C	Collector Power Dissipation	350	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	35			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	4			V
Collector cut-off current	I _{CBO}	V _{CB} =35V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =12V, I _C =2mA	40		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.4	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA			1	V
Transition frequency	f _T	V _{CE} =10V, I _C =1mA	100		400	MHz
Power Gain	G _{pe}	V _{CE} =6V, I _C =1mA, f=10.7MHz	27		33	dB

CLASSIFICATION OF h_{FE(1)}

Rank	R	O	Y
Range	40-80	70-140	120-240
Marking	RR1	RO1	RY1





