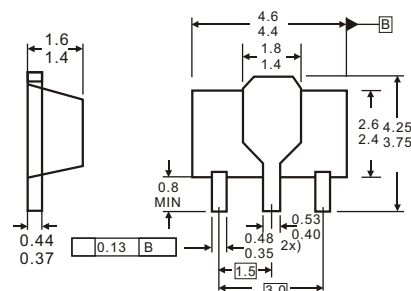


1. BASE
2. COLLECTOR
3. EMITTER

SOT-89


Dimensions in inches and (millimeters)

Features

- ✧ Low speed switching

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

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	-40	V
V _{CE0}	Collector-Emitter Voltage	-30	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-3	A
P _C	Collector Power Dissipation	0.5	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

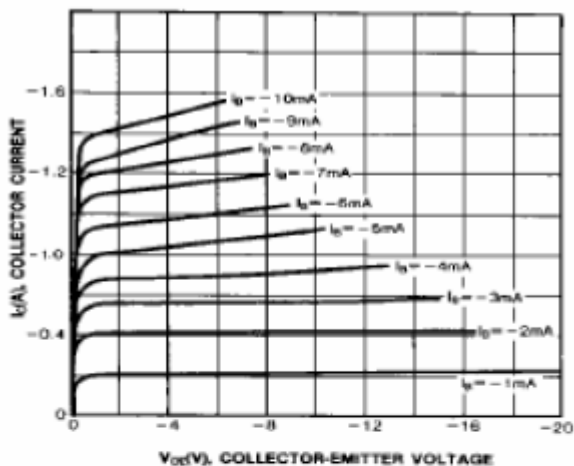
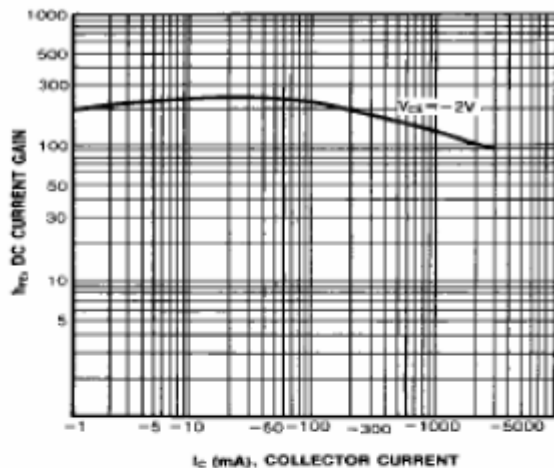
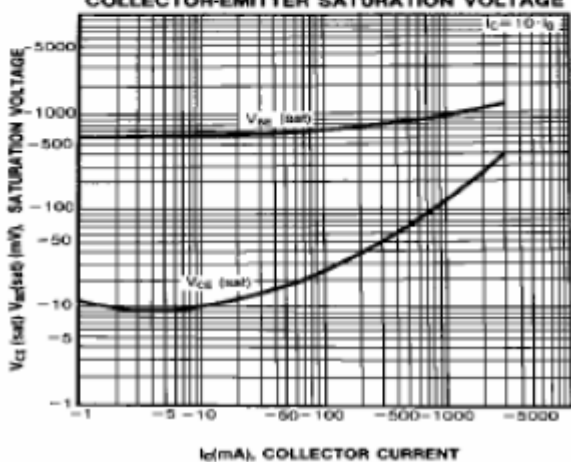
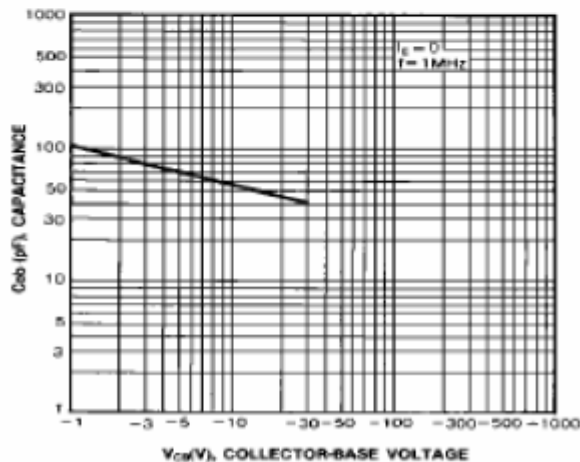
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CB0}	I _C =-100μA, I _E =0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CE0}	I _C = -10mA, I _B =0	-30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100μA, I _C =0	-5			V
Collector cut-off current	I _{CB0}	V _{CB} = -40V, I _E =0			-1	μA
Collector cut-off current	I _{CE0}	V _{CE} =-30V, I _B =0			-10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-6V, I _C =0			-1	μA
DC current gain	h _{FE}	V _{CE} = -2V, I _C = -1A	60		400	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-2A, I _B = -0.2A			-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-2A, I _B = -0.2A			-1.5	V
Transition frequency	f _T	V _{CE} = -5V, I _C =-0.1A f =10MHz		80		MHz

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical characteristics

STATIC CHARACTERISTIC

DC CURRENT GAIN

**BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE**

COLLECTOR OUTPUT CAPACITANCE

CURRENT GAIN-BANDWIDTH PRODUCT
