

■ NPN RF Transistors

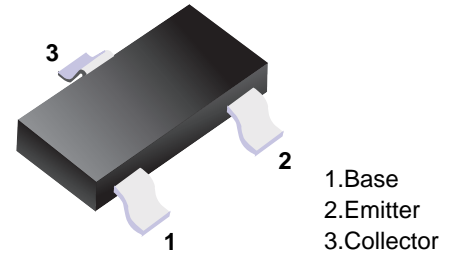
■ DESCRIPTION

- Low Noise
- High Current-Gain Bandwidth Product



■ APPLICATIONS

- Designed for use in VHF RF amplifier, local oscillator, mixer.



■ Simplified outline(SOT-23)

h_{FE} Classifications

Marking	T32	T33	T34
h _{FE}	60-120	90-180	120-240

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

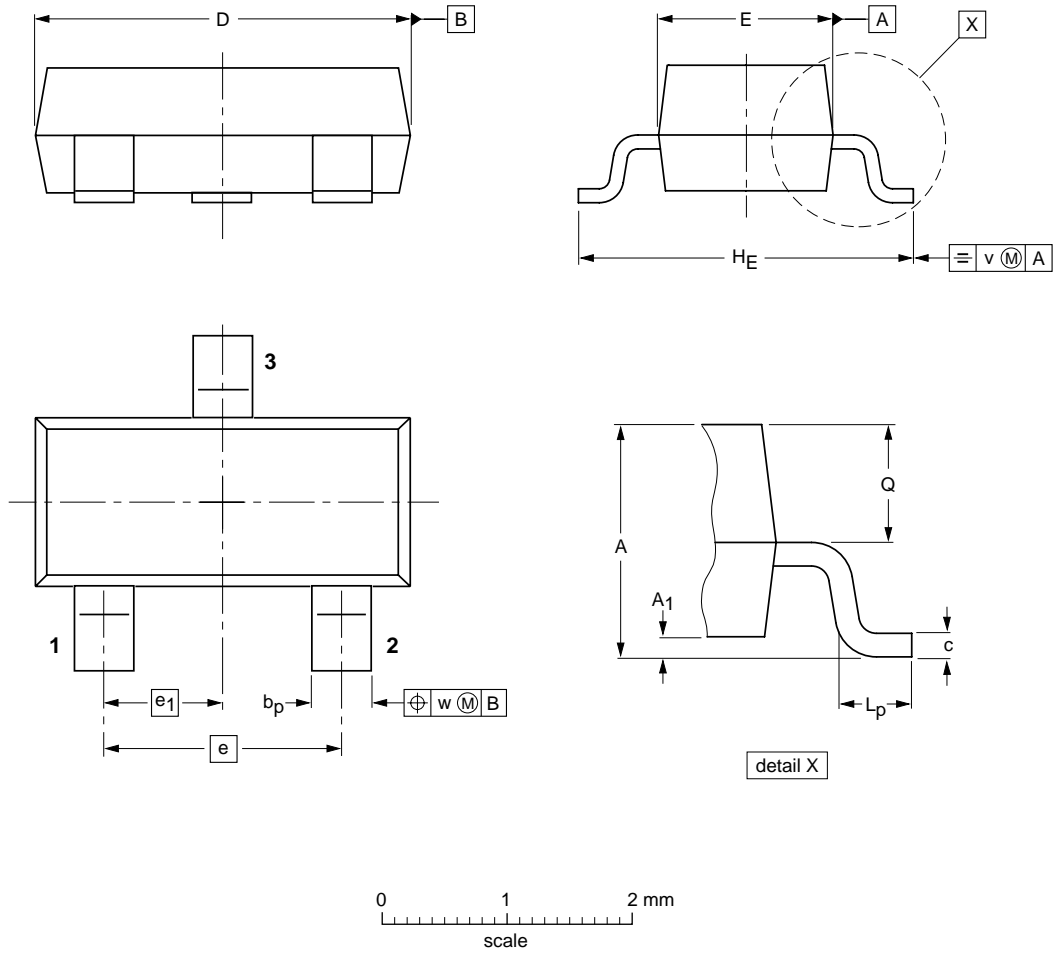
SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	30	V
V _{CEO}	Collector-Emitter Voltage	15	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	50	mA
P _C	Collector Power Dissipation @T _C =25°C	0.15	W
T _J	Junction Temperature	125	°C
T _{stg}	Storage Temperature Range	-55~125	°C

ELECTRICAL CHARACTERISTICS T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 10mA ; I _B = 1mA			0.5	V
I _{CB0}	Collector Cutoff Current	V _{CB} = 12V; I _E = 0			0.1	μ A
h _{FE}	DC Current Gain	I _C = 5mA ; V _{CE} = 10V	60		240	
f _T	Current-Gain—Bandwidth Product	I _C = 5mA ; V _{CE} = 10V	800	1100		MHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V;f= 1.0MHz			1.5	pF
r _{bb'} • CC	Base Time Constant	I _C = 5mA ; V _{CB} = 10V;f= 31.9MHz		10	15	ps

Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1