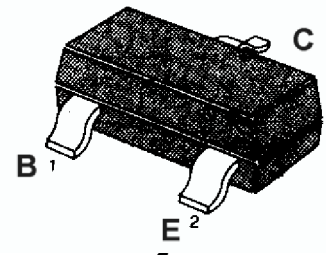


APPLICATION: High Frequency Amplifier Applications,

 AM High Frequency Amplifier Applications,
 AM Frequency Converter Applications.

MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	35	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	4	V
Collector current	I_C	100	mA
Emitter current	I_E	-100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{stg}	-55~125	°C

SOT-23


1.Base 2 .Emitter 3 .Collector

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	40		240		$V_{CE}=12V, I_C=2mA$
Collector Cut-off Current	I_{CBO}			0.1	μA	$V_{CB}=20V, I_E=0$
Emitter Cut-off Current	I_{EBO}			1	μA	$V_{EB}=2V, I_C=0$
Collector-Base Breakdown Voltage	BV_{CBO}	35			V	$I_C=0.05mA, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	30			V	$I_C=1mA, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	4			V	$I_E=0.05mA, I_C=0$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1	V	$I_C=10mA, I_B=1mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.4	V	$I_C=10mA, I_B=1mA$
Gain bandwidth product	f_T	80	120		MHz	$I_C=2mA, V_{CE}=10V, f=1MHz$
Common Base Output Capacitance	C_{ob}		2.2	3	pF	$V_{CB}=10V, I_E=0, f=1MHz$
Noise Figure	N_F		2	3.5	dB	$V_{CE}=10V, I_E=-1mA, f=1MHz, R_G=50\Omega$

 h_{FE} Classification And Marking

Print Mark	FR	FO	FY
Classification	R	O	Y
h_{FE}	40~80	70~140	120~240