2SC2320

NPN Epitaxial Planar Silicon Transistor

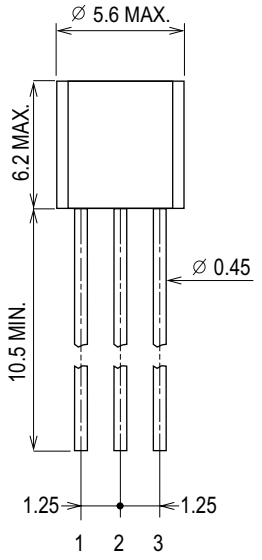
Audio Frequency Voltage Amplifier Applications

Low Noise Amplifier Applications

Excellent hFE Linearity

Complementary to 2SA999

Unit : mm



1 : Emitter

2 : Collector

3 : Base

EIAJ : SC-43

JEDEC : TO-92

MAXIMUM RATINGS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector-Emitter Voltage	V_{CEO}	50	V
Collector Current	Ic	200	mA
Collector Power Dissipation	Pc	300	mW
Junction Temperature	Tj	125	°C
Storage Temperature Range	Tstg	-55~+125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	Ic = 100μA, R_{BE} = ∞	50			V
Collector Cut-off current	I_{CBO}	V_{CB} = 50V, I_E = 0			0.1	μA
Emitter Cut-off current	I_{EBO}	V_{EB} = 6V, Ic = 0			0.1	μA
DC Current Gain	h_{FE}	V_{CE} = 6V, Ic = 1mA	90		800	
DC Current Gain	h_{FE}	V_{CE} = 6V, Ic = 0,1mA	50			
Collector-Emitter Saturation Voltage	V_{CE}(sat)	Ic = 100mA, I_B = 10mA			0.3	V
Transition Frequency	f_T	V_{CE} = 6V, I_E = 10mA		200		MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 6V, I_E = 0, f = 1MHz		3,5		pF
Noise Figure	NF	V_{CE} = 6V, I_E = 0,3mA f = 100Hz, R_G = 10kΩ			2	dB

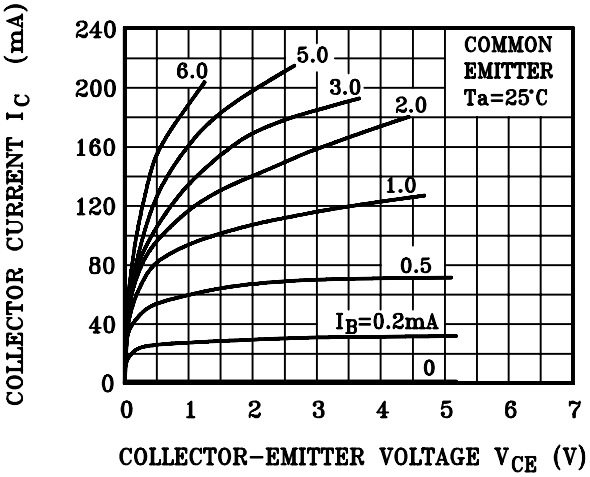
h_{FE} Rank classification :

Rank	D	E	F	G
h_{FE}	90~180	150~300	250~500	400~800

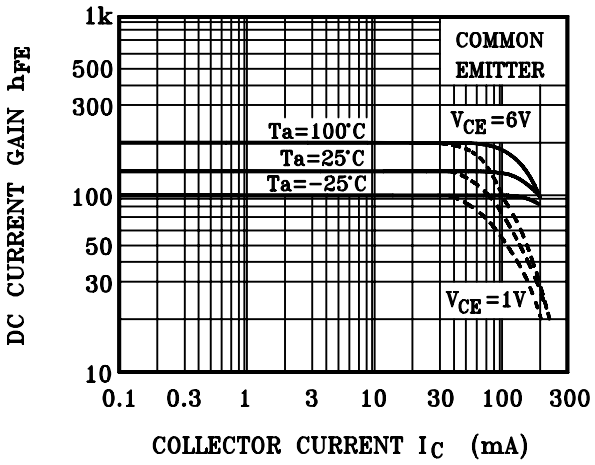
MITSUBISHI ELECTRIC

2SC2320

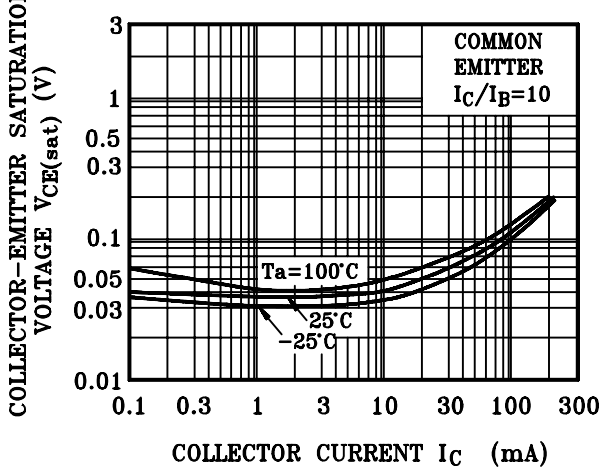
$I_C - V_{CE}$



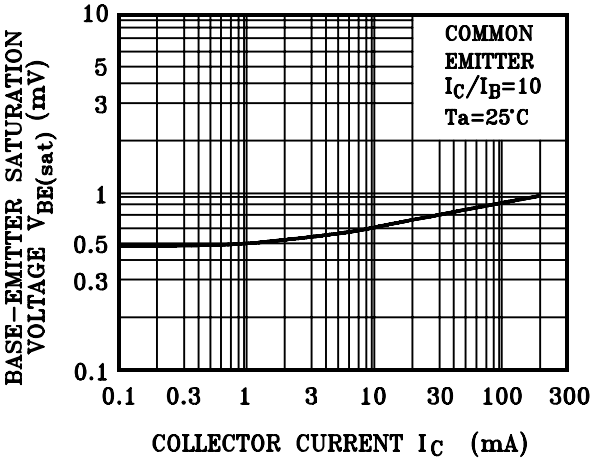
$h_{FE} - I_C$



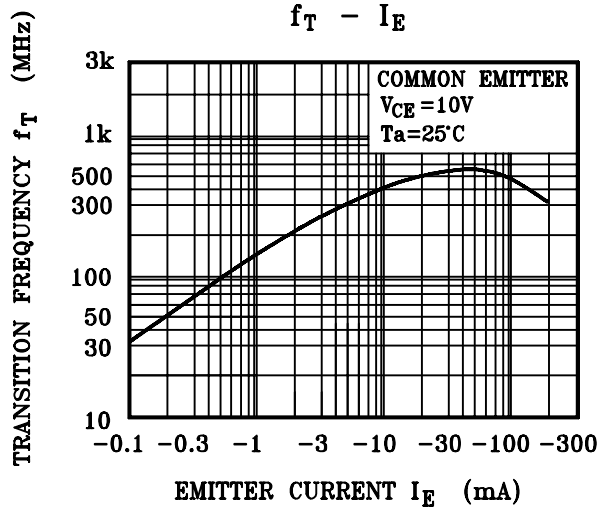
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



$f_T - I_E$



$I_B - V_{BE}$