〈Transistor〉

2SC5477

For High Frequency Amplify Application
Silicon NPN Epitaxial Type (Mini type)

DESCURIPTION

2SC5477 is a super mini packege resin sealed silicon NPN epitaxial type transistor. It is designed for high frequency amplify application.

FEATURE

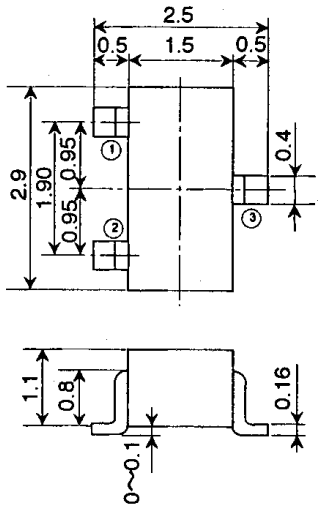
- Super mini package for easy mounting
- High gain band width product

APPLICATION

Small type machine high frequency amplify application

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

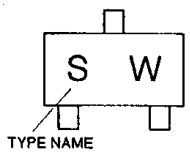
① : BASE
② : EMITTER
③ : COLLECTOR

EIAJ : SC-59
JEDEC : TO-236 resemblance

MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	RATINGS	UNIT
V_{CBO}	Collector to Base voltage	30	V
V_{EBO}	Emitter to Base voltage	4	V
V_{CEO}	Collector to Emitter voltage	20	V
I_C	Collector current	50	mA
P_C	Collector dissipation(Ta=25°C)	150	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temprature	-55to+150	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	I_C=50μA, I_E=0mA	30			V
$V_{(BR)CEO}$	C to E break down voltage	I_C=100μA, R_{BE}=∞	20			V
$V_{(BR)EBO}$	E to B break down voltage	I_C=50μA, I_C=0mA	4			V
I_{CBO}	Collector cut off current	V_{CB}=20V, I_E=0			0.5	μA
I_{EBO}	Emitter cut off current	V_{EB}=3V, I_C=0			0.5	μA
h_{FE}	DC forward current gain	V_{CE}=10V, I_C=5mA	50	148		—
$V_{CE(sat)}$	C to E Saturation voltage	I_C=10mA, I_B=1mA		0.1	0.3	V
f_T	Gain band width product	V_{CE}=5V, I_E=-10mA	600	1100		MHz
C_{ob}	Collector output capacitance	V_{CB}=6V, I_E=0, f=1MHz		1.2	1.5	pF

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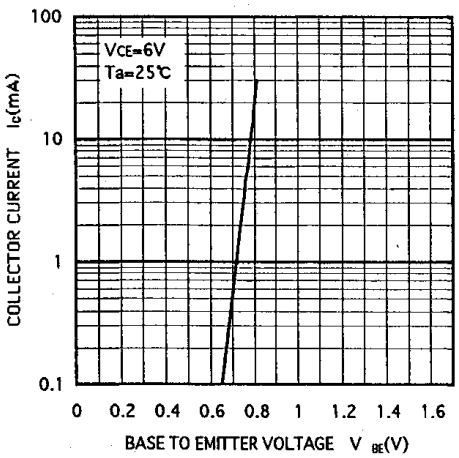
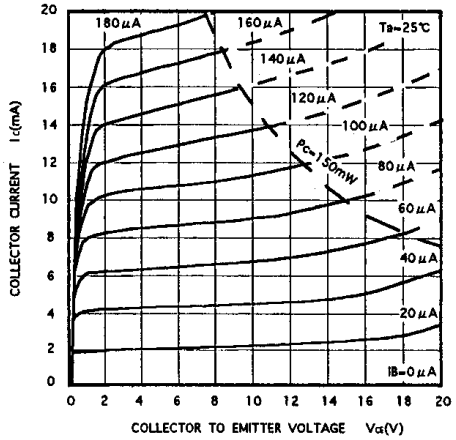
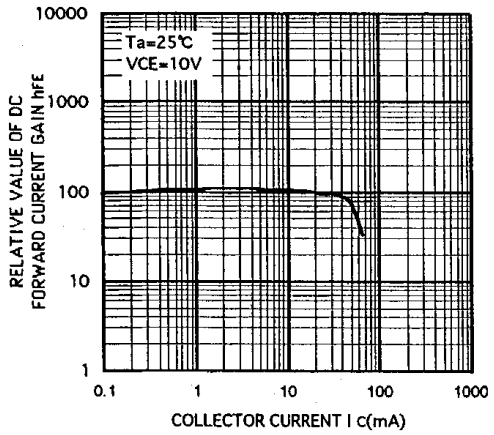
COMMON EMITTER TRANSFER



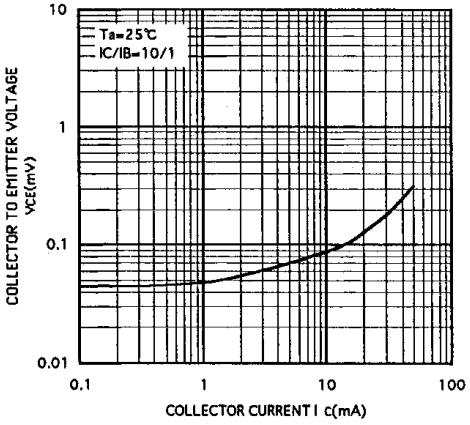
COMMON EMITTER OUTPUT



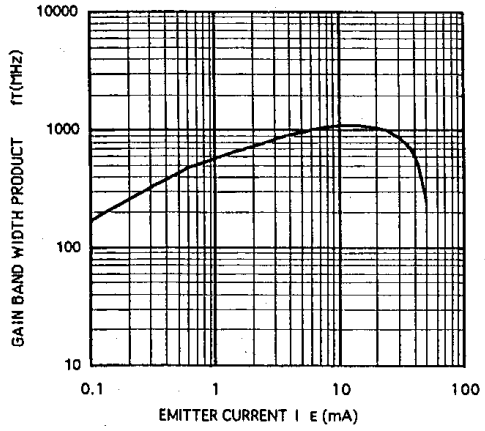
DC FORWARD CURRENT GAIN
VS.COLLECTOR CURRENT



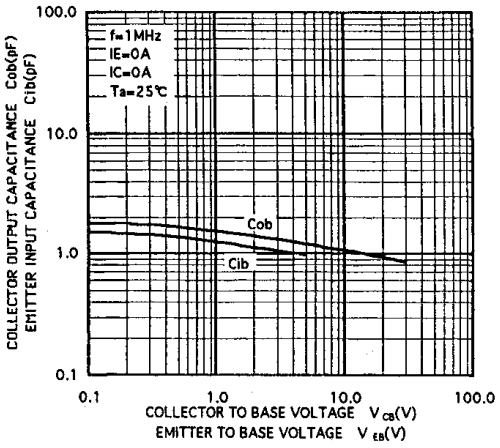
COLLECTOR TO EMITTER
SATURATION VOLTAGE VS.
COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS.EMITTER CURRENT



INPUT,OUTPUT CAPACITANCE
VS. BASE VOLTAGE



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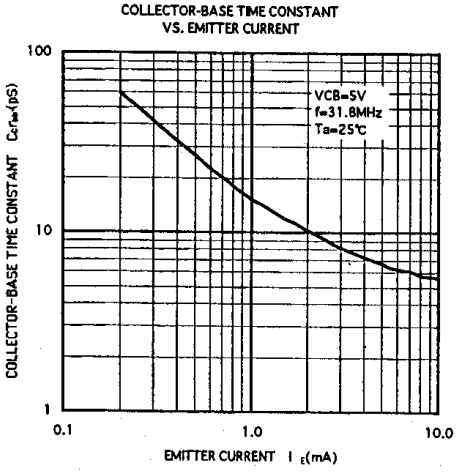

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