

(Transistor)  
**2SC5477**

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

**DESCRIPTION**

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

**FEATURE**

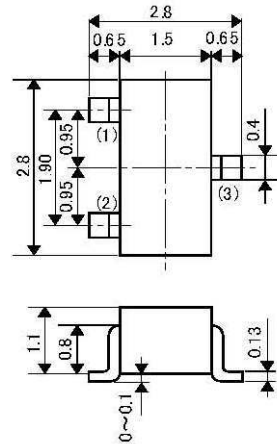
- Super mini package for easy mounting
- High gain band width product

**APPLICATION**

Small type machine high frequency amplify application

**OUTLINE DRAWING**

Unit:mm



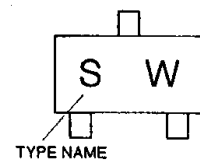
**TERMINAL CONNECTOR**

- ① : BASE
  - ② : EMITTER
  - ③ : COLLECTOR
- EIAJ : SC-59  
JEDEC : TO-236 resemblance

**MAXIMUM RATINGS (Ta=25°C)**

SYMBOL	PARAMETER	RATINGS	UNIT
V <sub>CB0</sub>	Collector to Base voltage	30	V
V <sub>EB0</sub>	Emitter to Base voltage	4	V
V <sub>CE0</sub>	Collector to Emitter voltage	20	V
I <sub>c</sub>	Collector current	50	mA
P <sub>c</sub>	Collector dissipation(Ta=25°C)	150	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55to+150	°C

**MARKING**



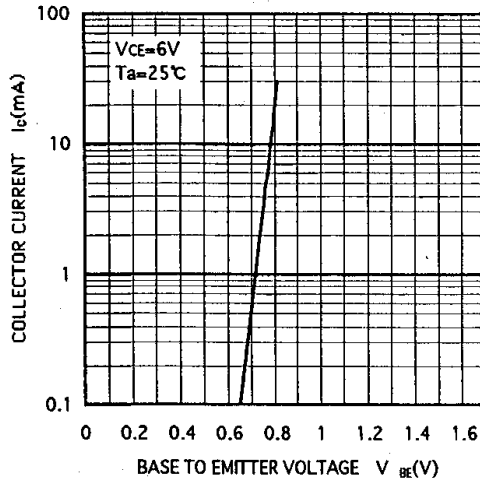
**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V(BR)CBO	C to B break down voltage	I <sub>c</sub> =50 μA, I <sub>E</sub> =0mA	30			V
V(BR)CEO	C to E break down voltage	I <sub>c</sub> =100 μA, R <sub>BE</sub> =∞	20			V
V(BR)EBO	E to B break down voltage	I <sub>c</sub> =50 μA, I <sub>c</sub> =0mA	4			V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =20V, I <sub>E</sub> =0			0.5	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =3V, I <sub>c</sub> =0			0.5	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =10V, I <sub>c</sub> =5mA	50	148		—
V <sub>CE(sat)</sub>	C to E Saturation voltage	I <sub>c</sub> =10mA, I <sub>B</sub> =1mA		0.1	0.3	V
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =5V, I <sub>E</sub> =-10mA	600	1100		MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz		1.2	1.5	pF

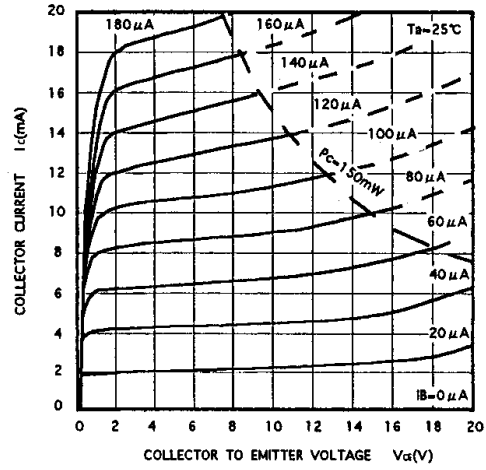
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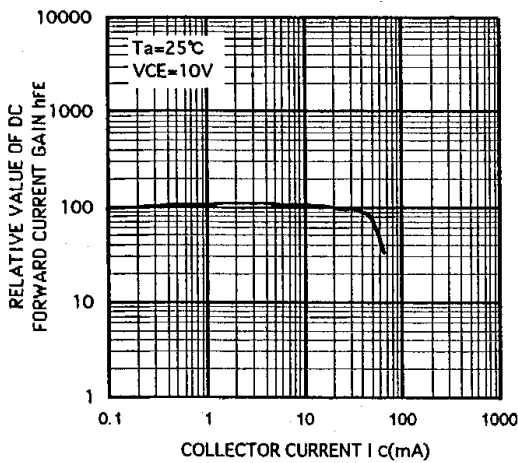
COMMON EMITTER TRANSFER



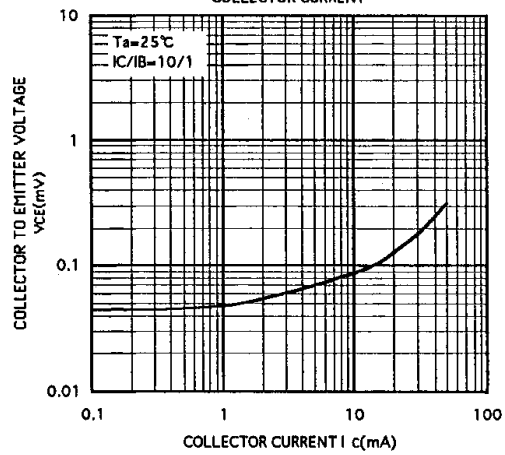
COMMON EMITTER OUTPUT



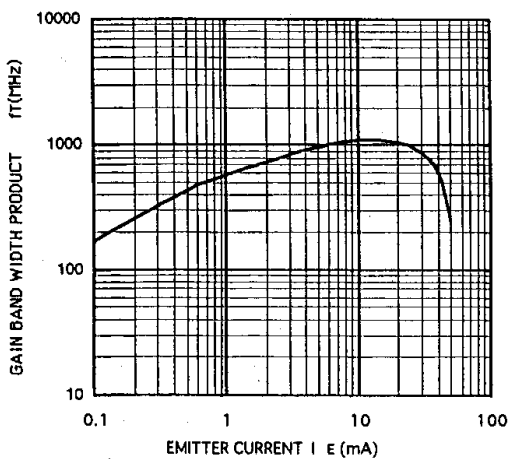
DC FORWARD CURRENT GAIN  
VS. COLLECTOR CURRENT



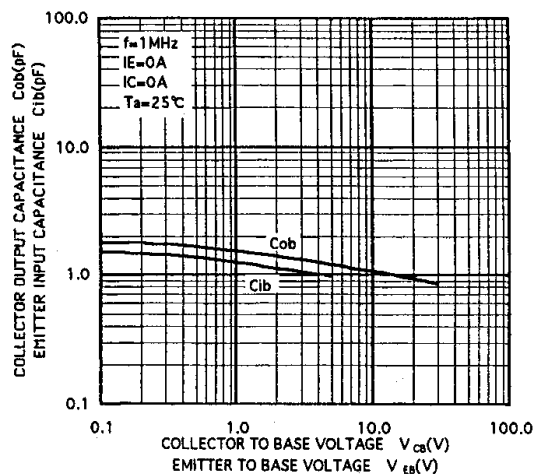
COLLECTOR TO EMITTER  
SATURATION VOLTAGE VS.  
COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT  
VS. EMITTER CURRENT

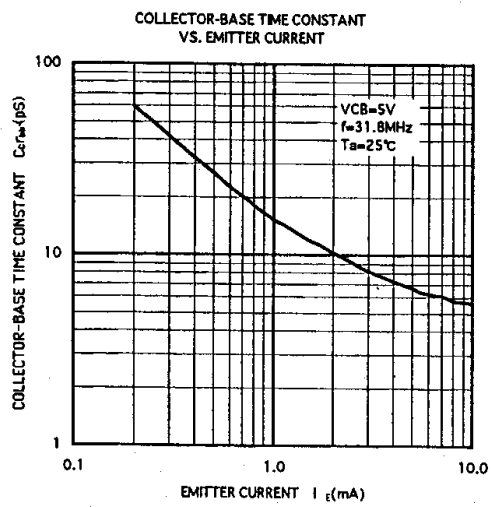


INPUT, OUTPUT CAPACITANCE  
VS. BASE VOLTAGE



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