

PRELIMINARY**2SC5789**

Notices: This is not a final specification.
Some parametric limits are subject to change.

FOR HIGH FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC5789 is a ultra super mini package resin sealed silicon NPN epitaxial transistor, It is designed for high frequency application. Since it is a super-thin flat lead type package, a high-density mounting are possible.

FEATURE

Super-thin flat lead type package.
t=0.45mm
High gain bandwidth product.
fT=12.0GHz
High gain, low noise.
Can operate at low voltage.

APPLICATION

For TV tuners, high frequency amplifier, cellular phone system.

MAXIMUM RATINGS(Ta=25)

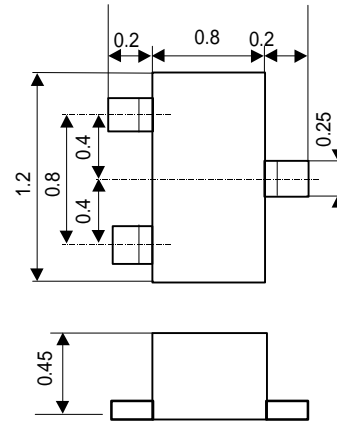
Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	15	V
V _{CEO}	Collector to Emitter voltage	6	V
V _{EBO}	Emitter to Base voltage	1.5	V
I _O	Collector current	50	mA
P _c	Collector dissipation		mW
T _j	Junction temperature	+ 125	
T _{stg}	Storage temperature	-55 ~ + 125	

ELECTRICAL CHARACTERISTICS(Ta=25)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
Collector cut off current	ICBO	V _{CB} =10V, I _E =0mA	-	-	1.0	μA
Emitter cut off current	IEBO	V _{EB} =1V, I _C =0mA	-	-	1.0	μA
DC forward current gain	hFE	V _{CE} =5V, I _C =10mA	30	-	250	
Gain bandwidth product	fT	V _{CE} =5V, I _E =10mA	-	12.0	-	GHz
Collector output capacitance	Cob	V _{CB} =5V, I _E =0mA, f=1MHz	-	0.7	-	pF
Insertion power gain	S ₂₁ ²	V _{CE} =5V, I _C =10mA, f=1GHz	10.0	13.0	-	dB
Noise figure	NF	V _{CE} =5V, I _C =5mA, f=1GHz	-	1.2	-	dB

OUTLINE DRAWING

Unit: mm



JEITA:

TERMINAL CONNECTER

: BASE
: EMITTER
: COLLECTOR



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