<SMALL-SIGNAL TRANSISTOR>

2SC5625

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCLIPTION

2SC5625 is a super mini package resin sealed silicon NPN epitaxial transistor. It is designed for low frequency voltage application.

FEATURE

・Super mini package for easy mounting.

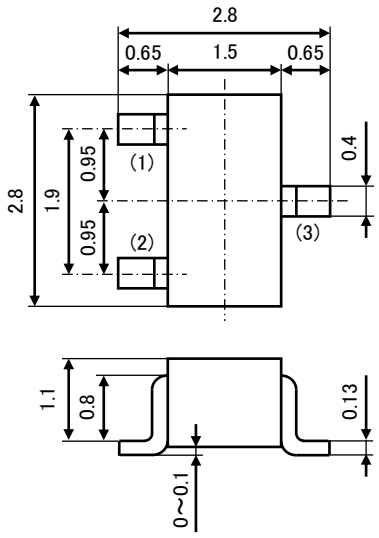
・Small collector to emitter saturation voltage. VCE(sat)=0.5V max

APPLICATION

DC/DC convertor, High voltage switching

OUTLINE DRAWING

Unit : mm



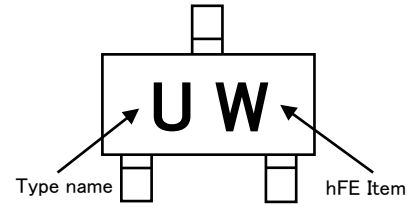
TERMINAL CONNECTER
(1) BASE
(2) EMITTER
(3) COLLECTOR

JEITA : SC-59
JEDEC : Similar toTO-236

MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	300	V
V_{EBO}	Emitter to Base voltage	7	V
V_{CEO}	Collector to Emitter voltage	300	V
I_C	Collector Current	100	mA
P_C	Collector Dissipation	200	mW
T_j	Junction Temperature	+150	℃
T_{stg}	Storage Temperature	−55～+150	℃

MARKING



ELECTRIC CHARACTERISTICS (Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B breakdown voltage	I_C=50μA, I_E=0	300	−	−	V
$V_{(BR)EBO}$	E to B breakdown voltage	I_E=50μA, I_C=0	7	−	−	V
$V_{(BR)CEO}$	C to E breakdown voltage	I_C=1mA, R_{BE}=∞	300	−	−	V
I_{CBO}	Collector Cutoff Current	V_{CB}=300V, I_E=0	−	−	0.5	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}=5V, I_C=0	−	−	0.5	μA
h_{FE}	DC Forward Current Gain	V_{CE}=10V, I_C=10mA	60	−	305	−
$V_{CE(sat)}$	C to E Saturation Voltage	I_C=100mA, I_B=10mA	−	−	0.5	V
f_T	Gain Bandwidth Product	V_{CE}=6V, I_E=−10mA	−	40	−	MHz
C_{ob}	Collector Output Capacitance	V_{CB}=6V, I_E=0, f=1MHz	−	3.0	−	pF

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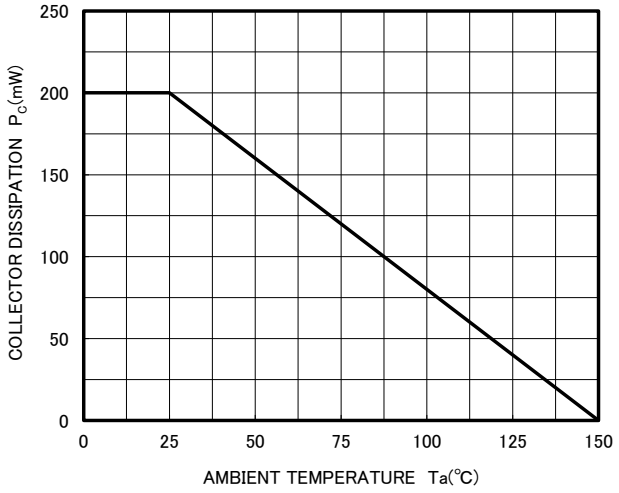
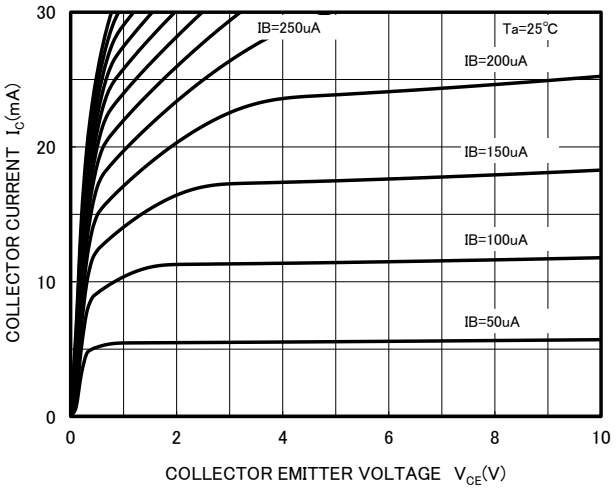
TYPCAL CHARACTERISTICS

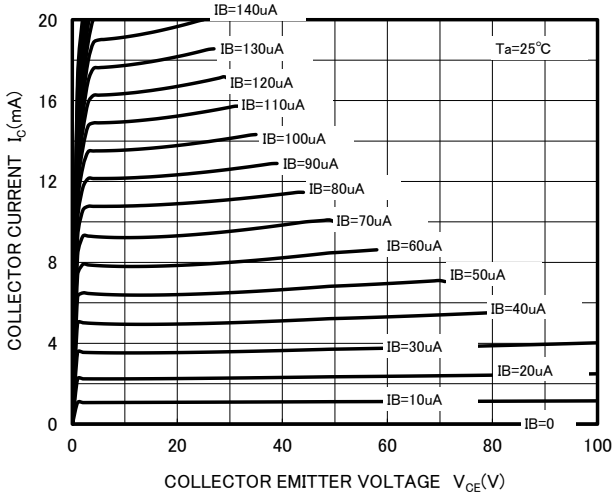
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



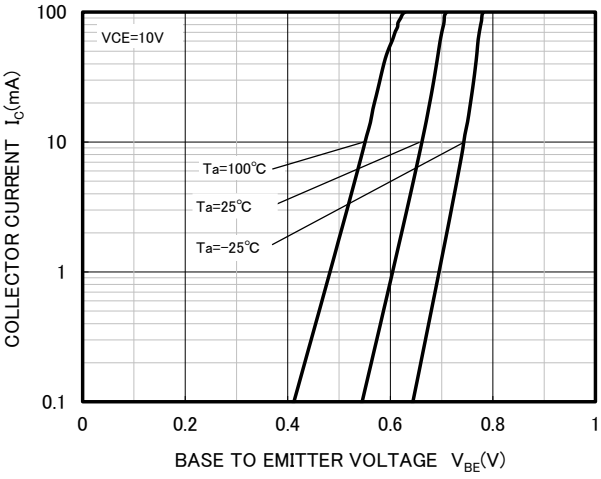
COMMON EMITTER OUTPUT(1)



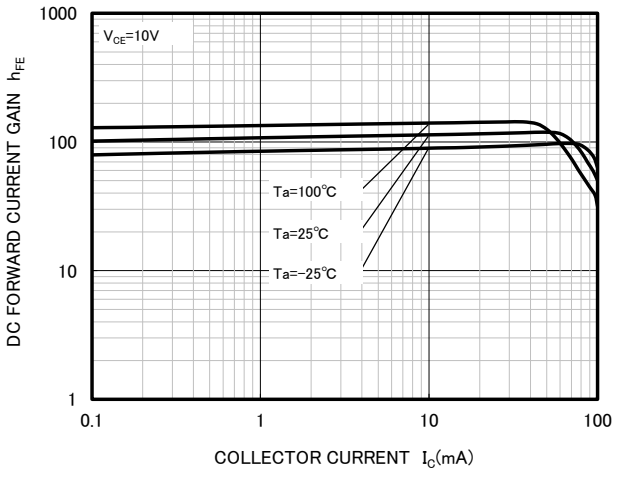
COMMON EMITTER OUTPUT(2)



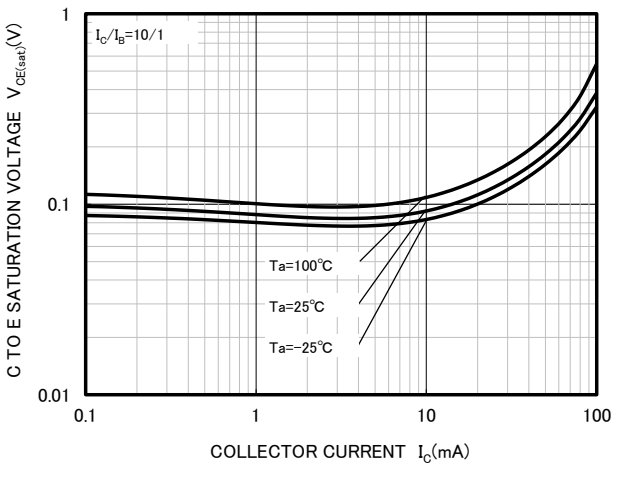
COMMON EMITTER TRANSFER



DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



C TO E SATURATION VOLTAGE VS.
COLLECTOR CURRENT



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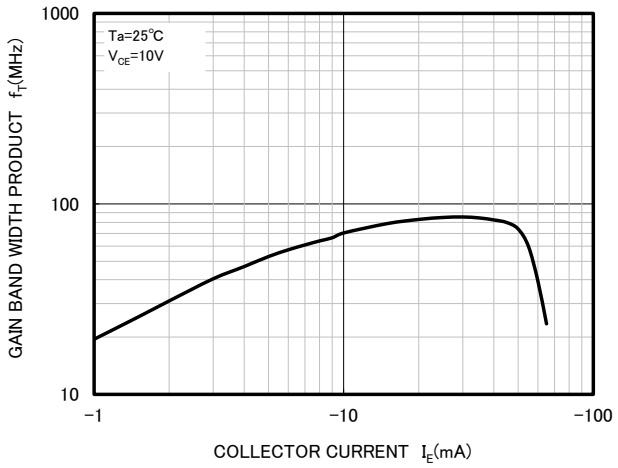
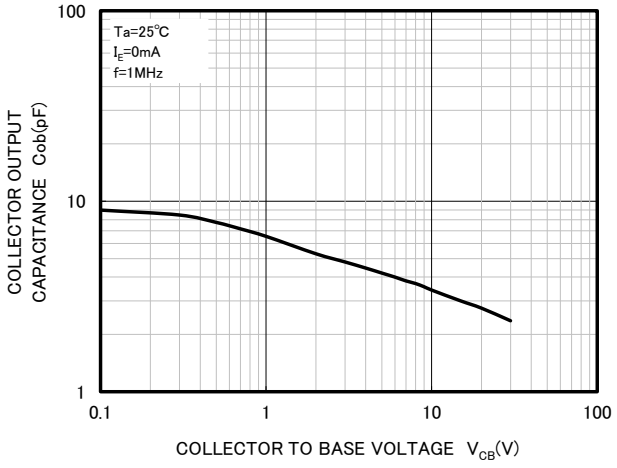
GAIN BAND WIDTH PRODUCT VS.
COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS.
COLLECTOR TO BASE VOLTAGE



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