

<SMALL-SIGNAL TRANSISTOR>

INC6002AC1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN TRANSISTOR

DESCRIPTION

INC6002AC1 is a silicon NPN transistor.

It is designed with high voltage.

FEATURE

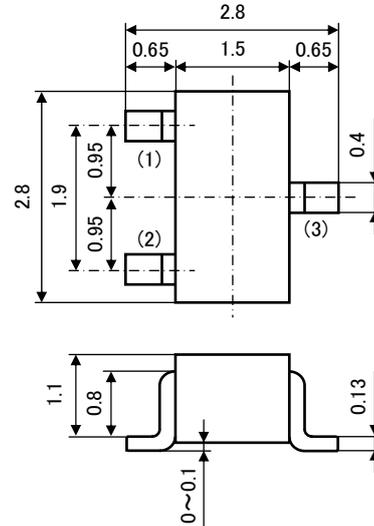
- Super mini package for easy mounting.
- High voltage $V_{CE0}=300V$

APPLICATION

DC/DC convertor, High voltage switching

OUTLINE DRAWING

Unit: mm

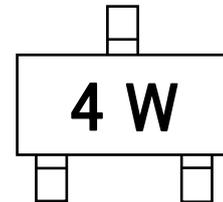


TERMINAL CONNECTOR JEITA: SC-59
 (1) BASE JEDEC: Similar to TO-236
 (2) EMITTER
 (3) COLLECTOR

MAXIMUM RATINGS ($T_a=25^\circ C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector-Base Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
V_{CEO}	Collector-Emitter Voltage	300	V
I_c	Collector Current	50	mA
P_C	Collector Dissipation	150	mW
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~+150	$^\circ C$

MARKING



ELECTRIC CHARACTERISTICS ($T_a=25^\circ C$)

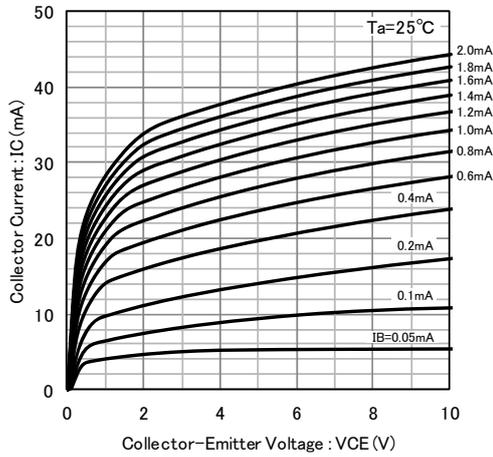
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_c=50\mu A, I_E=0$	300	-	-	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=50\mu A, I_C=0$	7	-	-	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_c=1mA, R_{BE}=\infty$	300	-	-	V
I_{CBO}	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	$V_{CE}=10V, I_c=1mA$	50	-	305	-
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_c=10mA, I_B=1mA$	-	-	1.0	V
f_T	Gain Bandwidth Product	$V_{CE}=10V, I_E=-10mA$	-	50	-	MHz
C_{ob}	Collector Output Capacitance	$V_{CB}=6V, I_E=0, f=1MHz$	-	1.9	-	pF

INC6002AC1

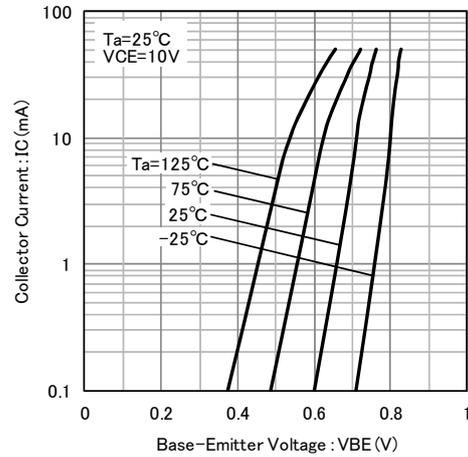
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TYPICAL CHARACTERISTICS

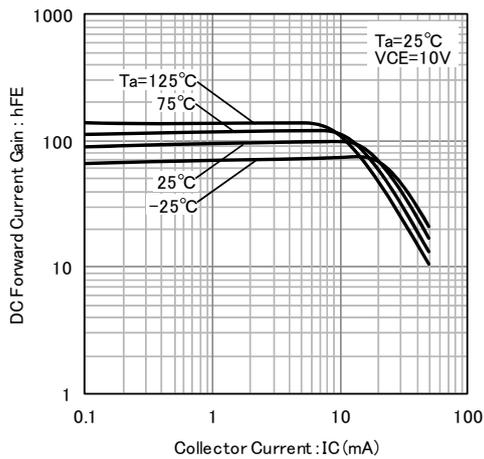
Common Emitter Output



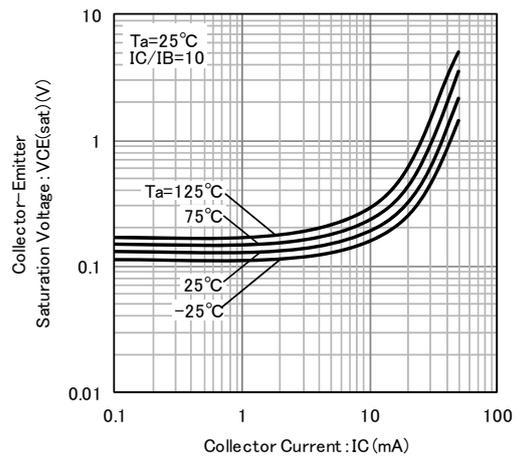
Common Emitter Transfer



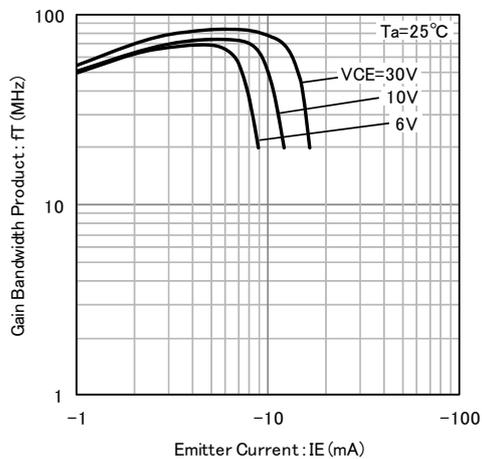
hFE-IC



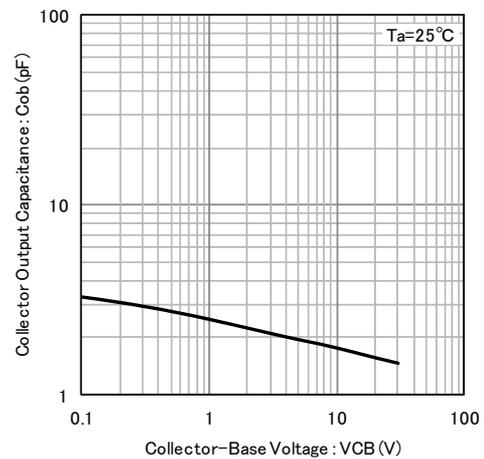
VCE(sat)-IC



fT-IE



Cob-VCB





6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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