INC6017AM1-TH50

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

AEC-Q101 Compliance

DESCRIPTION

INC6017AM1 is a silicon NPN transistor.

It is designed with high voltage.

FEATURE

・Small package for easy mounting.

・High voltage V_{CEO} = 160V

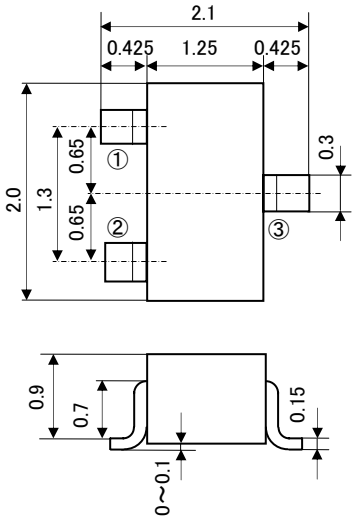
・Low voltage VCE(sat) = 0.15V(MAX)

APPLICATION

High voltage switching.

OUTLINE DRAWING

UNIT:mm



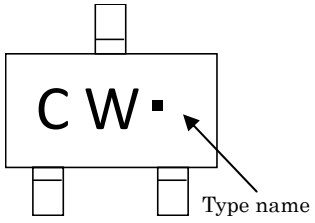
Terminal Connector
①:Base
②:Emitter
③:Collector

JEITA:SC-70
JEDEC:-

MAXIMUM RATING(Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	180	V
V_{EBO}	Emitter to Base voltage	6	V
V_{CEO}	Collector to Emitter voltage	160	V
I_{CM}	Peak collector current	200	mA
I_C	Collector current	100	mA
P_C	Collector dissipation(Ta=25℃)	200	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	−55～+150	℃

MARKING

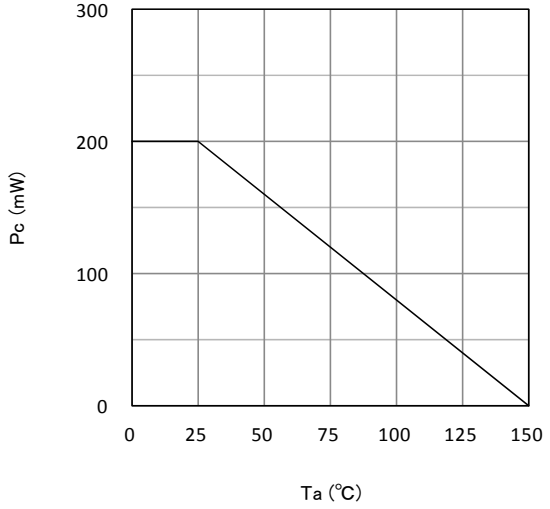


ELECTRICAL CHARACTERISTICS(Ta=25℃)

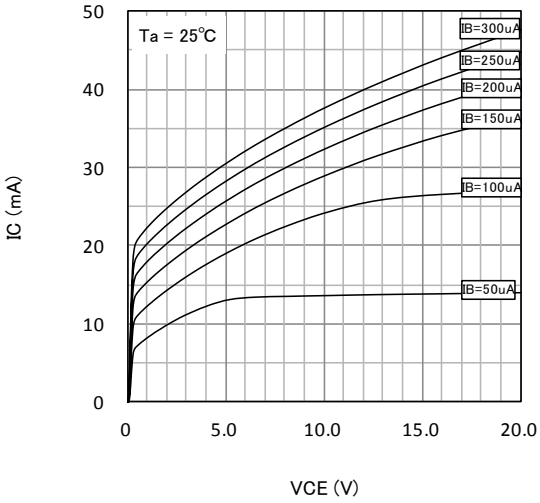
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	I_C=100uA, I_E=0	180	−	−	V
$V_{(BR)EBO}$	E to B breakdown voltage	I_E=10uA, I_C=0	6	−	−	V
$V_{(BR)CEO}$	C to E breakdown voltage	I_C=1mA, R_{BE}=∞	160	−	−	V
I_{CBO}	Collector cut off current	V_{CB}=120V, I_E=0	−	−	100	nA
I_{EBO}	Emitter cut off current	V_{EB}=4V, I_C=0	−	−	100	nA
hFE1	DC forward current gain1	VCE=5V, I_C=1mA	150	−	−	−
hFE2	DC forward current gain2	VCE=5V, I_C=10mA	200	−	500	−
hFE3	DC forward current gain3	VCE=5V, I_C=50mA	27	−	−	−
VCE(sat)	C to E saturation voltage	I_C=10mA, I_B=1mA	−	−	0.15	V
VBE(sat)	B to E saturation voltage	I_C=10mA, I_B=1mA	−	−	1.0	V
fT	Gain bandwidth product	VCE=10V, I_E=−10mA	100	−	300	MHz
Cob	Collector output capacitance	VCB=10V, I_E=0, f=1MHz	−	1.7	6	pF

TYPICAL CHARACTERISTICS

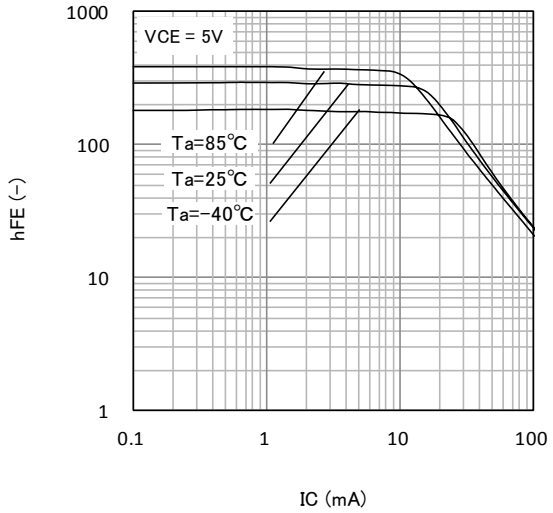
Pc - Ta



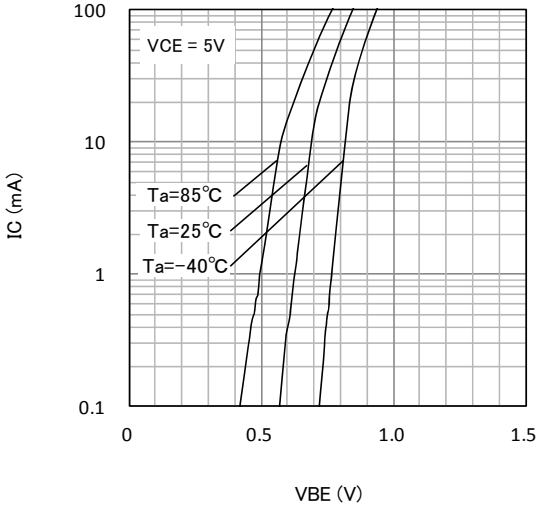
IC-VCE



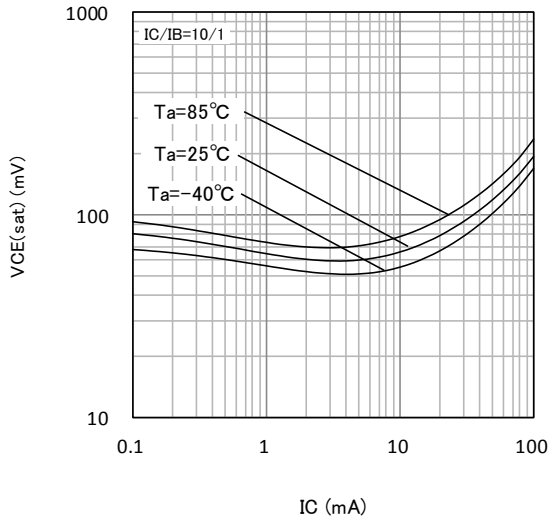
hFE-IC



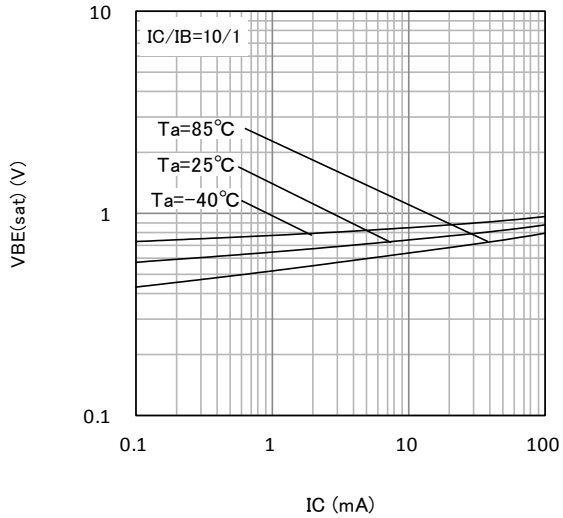
IC-VBE



VCE(sat)-IC



VBE(sat)-IC



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