PRELIMINARY

Notice : This is not a final specification

Some parametric are subject to change.

INC6008AC1

FOR HIGH CURRENT DRIVE APPLICATION

SILICON NPN EPITAXIAL TYPE

DESCRIPTION

INC6008AC1 is a silicon NPN epitaxial type transistor.

It is designed with high collector current and small $V_{CE(sat)}$.

FEATURE

- Super mini package for easy mounting
- High collector current(I_C=1A)
- Low collector saturation voltage

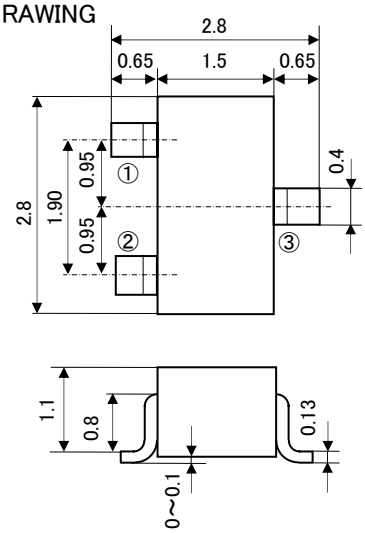
($V_{CE(sat)}$<0.7V_{max} ; I_C=150mA、I_B=15mA)

APPLICATION

Switching, Small type motor drive

OUTLINE DRAWING

UNIT : mm



Terminal Connector
①: Base
②: Emitter
③: Collector

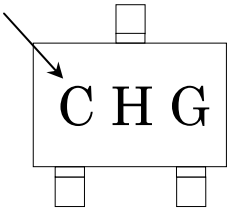
JEITA:SC-59
JEDEC: Similar to TO-236

MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
V_{CEO}	Collector to Emitter voltage	140	V
V_{CBO}	Collector to Base voltage	160	V
V_{EBO}	Emitter to Base voltage	5	V
I_C	Collector current	1	A
P_C	Collector dissipation(Ta=25℃)	200	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	−55～+150	℃

MARKING

Type Name



ELECTRICAL CHARACTERISTICS (Ta=25℃)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	I_C=10mA, I_B=0mA	140	−	−	V
$V_{(BR)CBO}$	C to B break down voltage	I_C=100μA, I_E=0mA	160	−	−	V
$V_{(BR)EBO}$	E to B break down voltage	I_E=100μA, I_C=0mA	5	−	−	V
I_{CBO}	Collector cut off current	V_{CB}=140V, I_E=0mA	−	−	0.1	μA
I_{EBO}	Emitter cut off current	V_{EB}=4V, I_C=0mA	−	−	0.1	μA
h_{FE1}	DC forward current gain1	V_{CE}=10V, I_C=100mA	95	−	305	−
h_{FE2}	DC forward current gain2	V_{CE}=10V, I_C=150mA	100	−	300	−
$V_{CE(sat)}$	C to E saturation voltage	I_C=150mA, I_B=15mA	−	−	0.7	V
$V_{BE(sat)}$	B to E saturation voltage	I_C=150mA, I_B=15mA	−	−	1.5	V
f_T	Gain bandwidth product	V_{CE}=10V, I_E=−50mA, f=100MHz	100	−	−	MHz
Cob	Collector output capacitance	V_{CB}=10V, f=1MHz	−	−	15	pF

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