PRELIMINARY

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

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 $V_{\text{CE(sat)}}$.

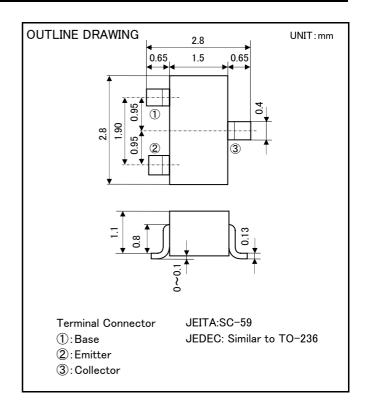
FEATURE

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

 $(V_{CE(sat)} < 0.7V_{max}; I_{C} = 150 \text{mA}, I_{B} = 15 \text{mA})$

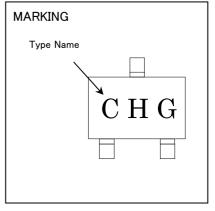
APPLICATION

Switching, Small type motor drive



MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V_{CEO}	Collector to Emitter voltage	140	>
V _{CBO}	Collector to Base voltage	160	٧
V_{EBO}	Emitter to Base voltage	5	٧
I c	Collector current	1	Α
P _c	Collector dissipation(Ta=25°C)	200	mW
T _j	Junction temperature	+150	လူ
T_{stg}	Storage temperature	-55 ~ +150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	C to E break down voltage	I _c =10mA, I _B =0mA	140	_	_	V
$V_{(BR)CBO}$	C to B break down voltage	$I_{c}=100 \mu A, I_{E}=0mA$	160	_	_	V
$V_{(BR)EBO}$	E to B break down voltage	$I_{E}=100 \mu A, I_{C}=0mA$	5	_	-	V
I _{CBO}	Collector cut off current	$V_{CB}=140V$, $I_{E}=0mA$	_	_	0.1	μΑ
I _{EBO}	Emitter cut off current	V _{EB} =4V, I _C =0mA	_	_	0.1	μΑ
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



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

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