

INC5004AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

PRELIMINARY

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

DESCRIPTION

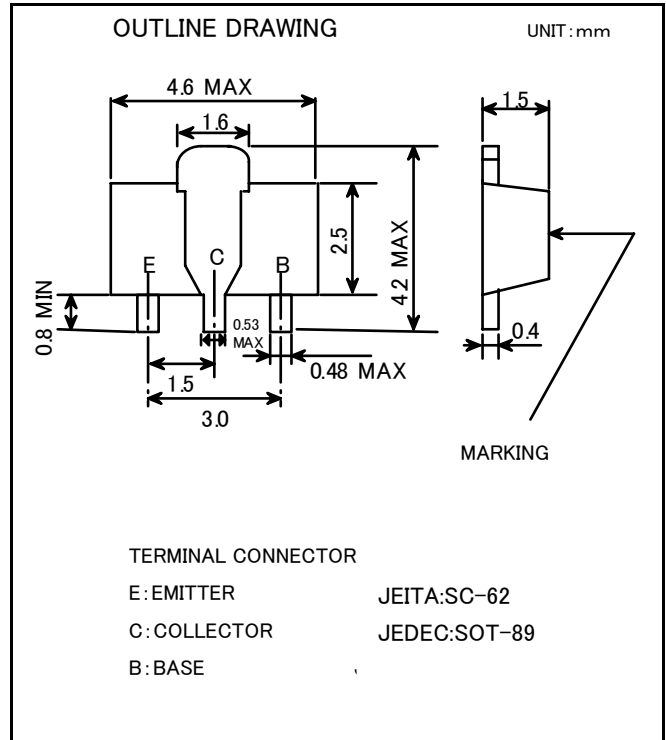
INC5004AP1 is a silicon NPN transistor.
It is designed with high voltage.

FEATURE

- Small package for easy mounting.
- E to B High voltage $V_{EBO}=9V$
- High collector current $I_{CM}=8A$
- Low voltage $V_{CE(sat)}=0.28V(\text{Type})$

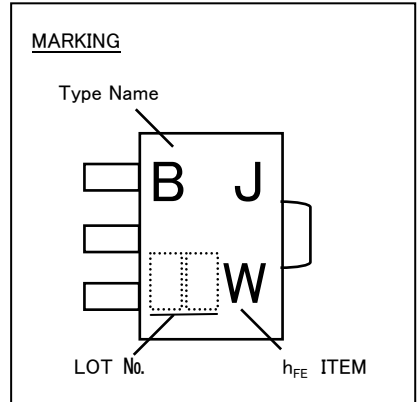
APPLICATION

Inverter, Stroboscope flash
DC-DC converter, High current switching



MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	50	V
V_{EBO}	Emitter to Base voltage	9	V
V_{CEO}	Collector to Emitter voltage	20	V
I_C	Collector current($P_C=2W$)	5	A
I_{CM}	Peak collector current *1	8	A
P_C	Collector dissipation($T_a=25^\circ C$)	500	mW
	Collector dissipation($T_a=25^\circ C$) *2	2	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55 ~ +150	°C



*1 Single pulse $P_w=10msec$

*2 Mounted on a glass ceramics board (46mm × 19mm × 0.8mm)

ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10 \mu A, I_E=0A$	50	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10 \mu A, I_C=0A$	9	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	20	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=40V, I_E=0A$	-	-	100	nA
I_{EBO}	Emitter cut off current	$V_{EB}=7V, I_C=0A$	-	-	100	nA
hFE1	DC forward current gain1	$V_{CE}=2V, I_C=500mA$	230	-	600	-
hFE2	DC forward current gain2	$V_{CE}=2V, I_C=2A$	150	-	-	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C=3A, I_B=100mA$	-	0.28	0.8	V
fT	Gain bandwidth product	$V_{CE}=6V, I_E=-50mA$	-	150	-	MHz
Cob	Collector output capacitance	$V_{CE}=10V, I_E=0A, f=1MHz$	-	-	50	pF



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