

ISC3247AS1

FOR RELAY DRIVE, POWER SUPPLY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISC3247AS1 is a silicon NPN epitaxial type transistor.

Designed with high voltage, high collector current, dissipation and high hFE.

FEATURE

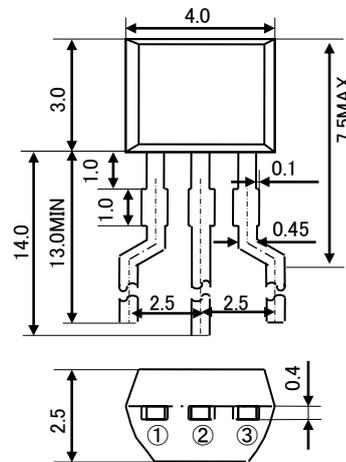
- High hFE hFE=600~1800
- Low collector to emitter saturation voltage.
V_{CE(sat)}=0.15V typ (@I_C=500mA/I_B=10mA)
- High voltage V_{CEO}=50V
- High collector dissipation. P_C=600mW

APPLICATION

Relay drive or power supply for audio machine, VCR, and other electronic machine.

OUTLINE DRAWING

Unit: mm



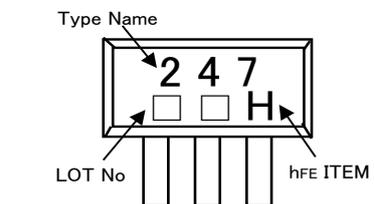
TERMINAL CONNECTOR

- ①: EMITTER JEITA: -
- ②: COLLECTOR JEDEC: -
- ③: BASE

MAXIMUM RATINGS (T_a=25°C)

Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	50	V
V _{EB0}	Emitter to Base voltage	6	V
V _{CEO}	Collector to Emitter voltage	50	V
I _C	Collector current	1	A
I _{CM}	Peak collector current	2	A
P _C	Collector dissipation	600	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



ELECTRICAL CHARACTERISTICS (T_a=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CBO}	C to B breakdown voltage	I _C =10 μA, I _E =0mA	50	-	-	V
V _{(BR)EBO}	E to B breakdown voltage	I _E =10 μA, I _C =0mA	6	-	-	V
V _{(BR)CEO}	C to E breakdown voltage	I _C =1mA, R _{BE} =∞	50	-	-	V
I _{CBO}	Collector cut off current	V _{CB} =40V, I _E =0mA	-	-	0.1	μA
I _{EBO}	Emitter cut off current	V _{EB} =2V, I _C =0mA	-	-	0.1	μA
hFE ※	DC forward current gain	V _{CE} =6V, I _C =100mA	600	-	1800	-
V _{CE(sat)}	C to E saturation voltage	I _C =500mA, I _B =10mA	-	0.15	0.5	V
fT	Gain bandwidth product	V _{CE} =10V, I _E =-10mA	-	130	-	MHz
Cob	Collector output capacitance	V _{CB} =10V, I _E =0mA, f=1MHz	-	12	-	pF

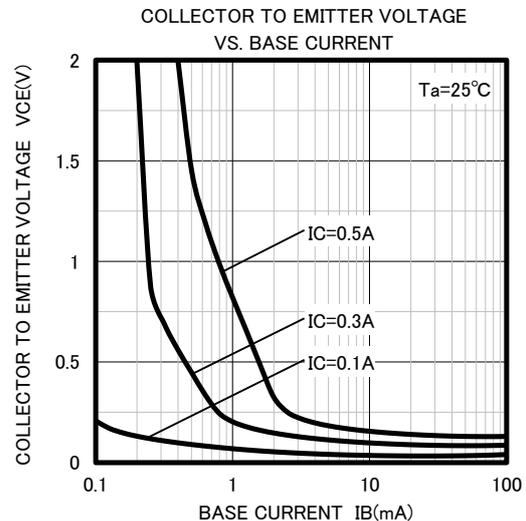
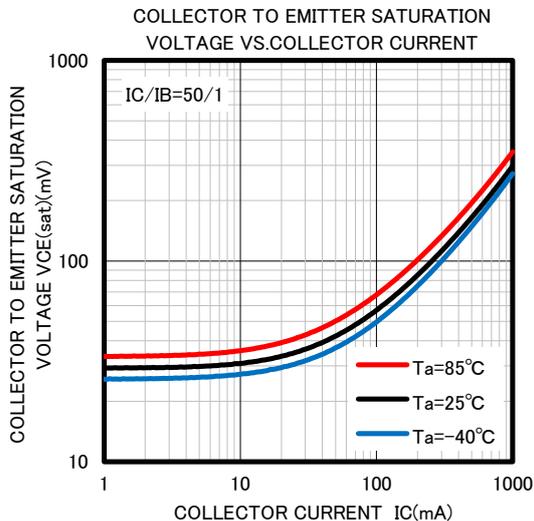
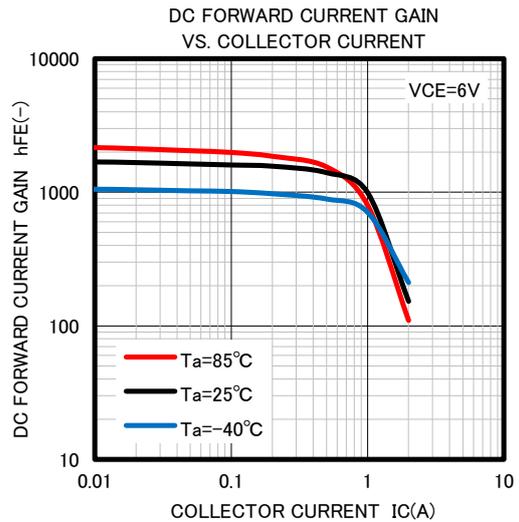
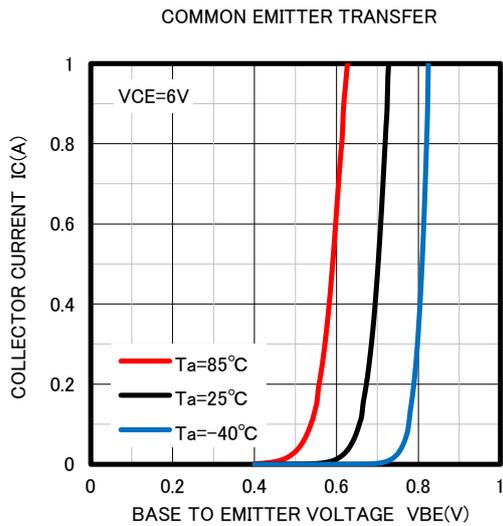
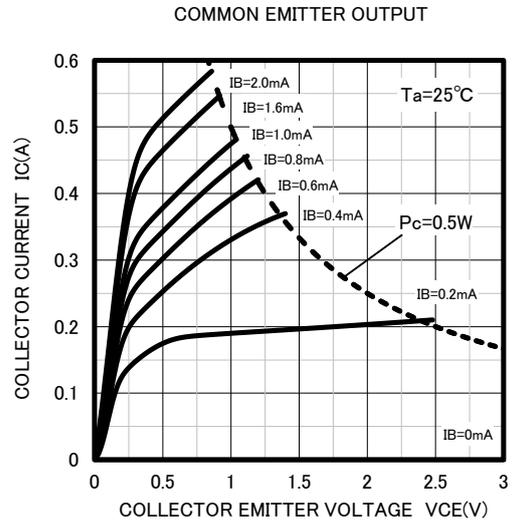
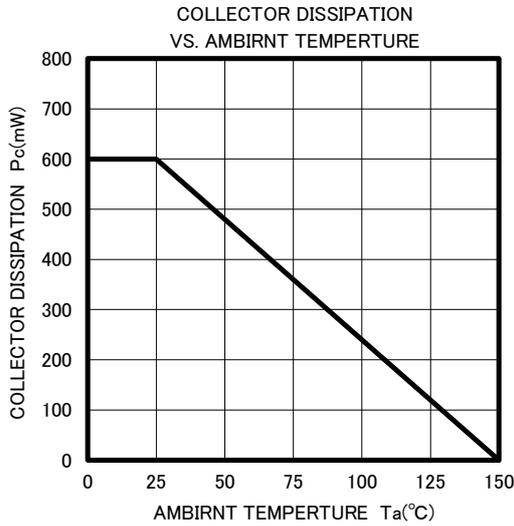
※) It shows hFE classification in right table.

Item	H	J
hFE	600~1200	900~1800

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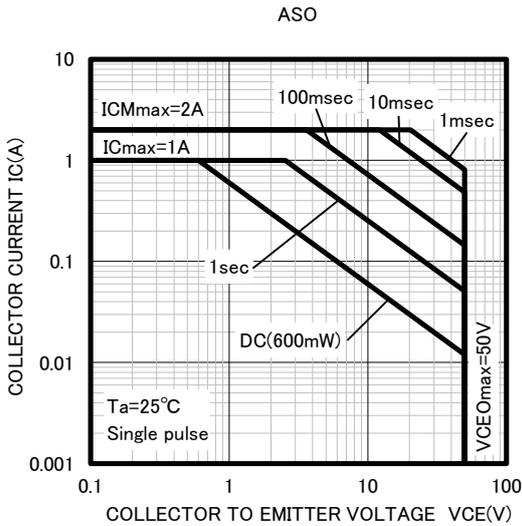
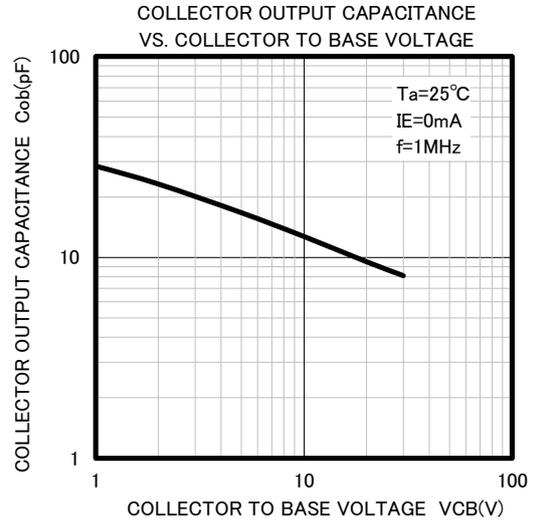
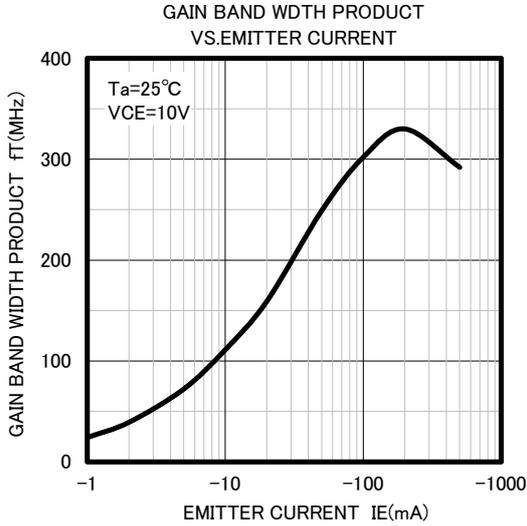
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TYPICAL CHARACTERISTICS



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