

ISC4356AS1

FOR HIGH CURRENT DRIVE APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISC4356AS1 is a silicon NPN epitaxial type transistor designed relay drive application.

FEATURE

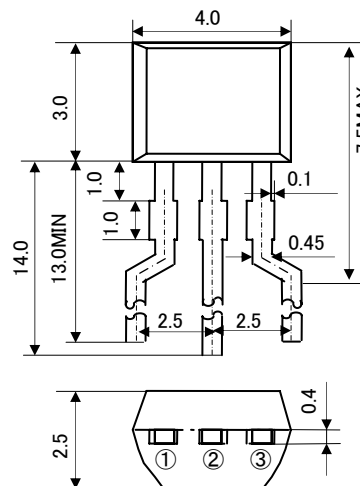
- High voltage. $V_{CE0}=60V$
- High collector current. $I_C=2A$
- Low $V_{CE(sat)}$ $V_{CE(sat)}=0.5V$ max (@ $I_C=1A$, $I_B=50mA$)
- High collector dissipation. $P_C=600mW$

APPLICATION

Audio machine, VCR, relay drive.

OUTLINE DRAWING

Unit: mm



JEITA:
JEDEC:

TERMINAL CONNECTER

- ①: EMITTER
②: COLLECTOR
③: BASE

MAXIMUM RATINGS ($T_a=25^{\circ}C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	60	V
V_{EBO}	Emitter to Base voltage	6	V
V_{CEO}	Collector to Emitter voltage	60	V
I_C	Collector current	2	A
I_{CM}	Peak collector current	3	A
P_C	Collector dissipation	600	mW
T_j	Junction temperature	+150	$^{\circ}C$
T_{stg}	Storage temperature	-55~+150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$)

Parameter	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A$, $I_E=0mA$	60	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A$, $I_C=0mA$	6	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=2mA$, $R_{BE}=\infty$	60	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=50V$, $I_E=0mA$	-	-	0.2	μA
I_{EBO}	Emitter cut off current	$V_{EB}=4V$, $I_C=0mA$	-	-	0.2	μA
hFE_{Σ}	DC forward current gain	$V_{CE}=4V$, $I_C=100mA$	55	-	300	-
$V_{CE(sat)}$	C to E Saturation Voltage	$I_C=1A$, $I_B=50mA$	-	0.2	0.5	V
f_T	Gain band width product	$V_{CE}=10V$, $I_E=-10mA$	-	80	-	MHz
C_{ob}	Collector output capacitance	$V_{CB}=10V$, $I_E=0mA$, $f=1MHz$	-	18	-	pF

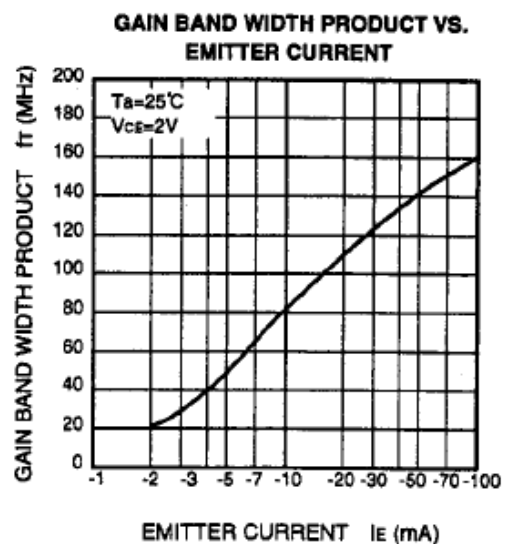
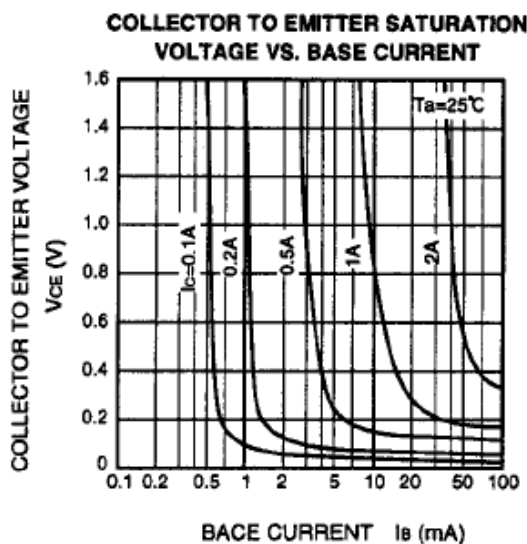
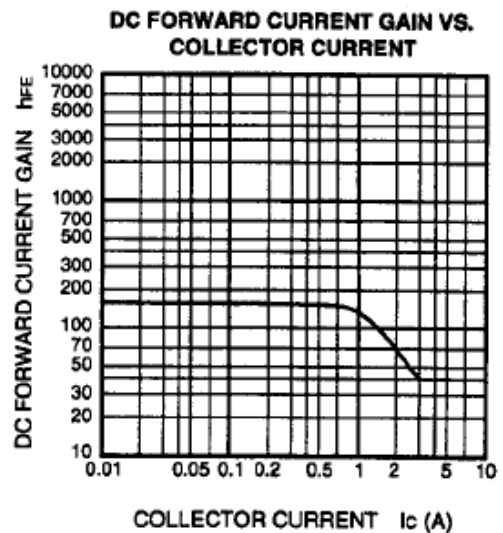
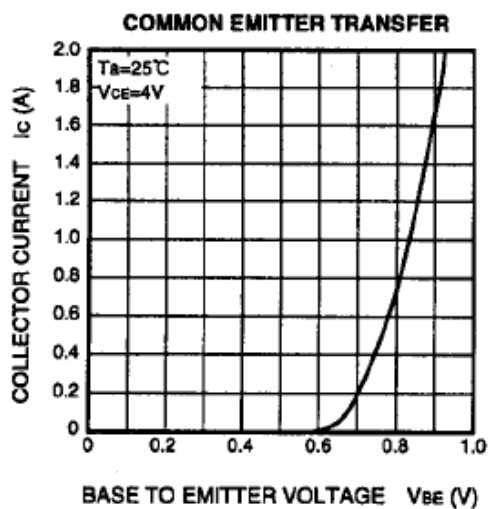
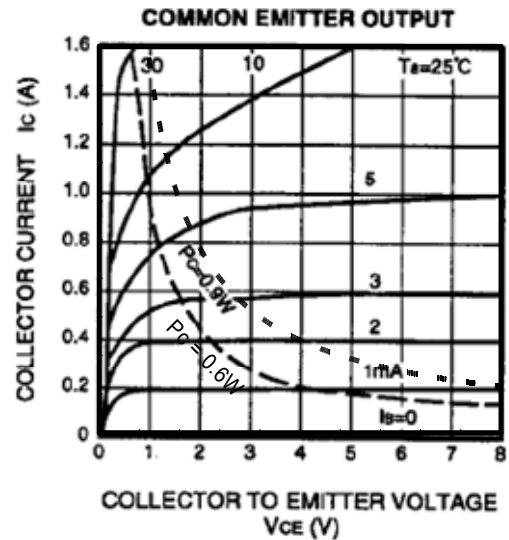
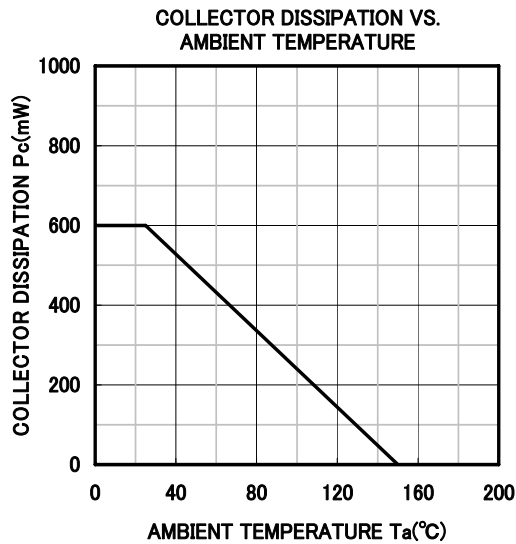
※) It shows hFE classification in right table.

Item	C	D	E
hFE item	55~110	90~180	150~300

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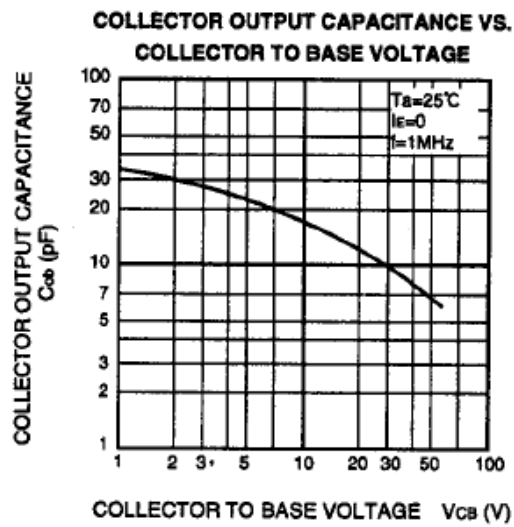
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TYPICAL CHARACTERISTICS



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

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