ISD1447AS1

FOR LOW FREQUENCY POWOR AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISD1447AS1 is a silicon NPN epitaxial type transistor designed for 2 to 3.5W output low frequency power amplify application. Complementary with ISB1035AS1.

FEATURE

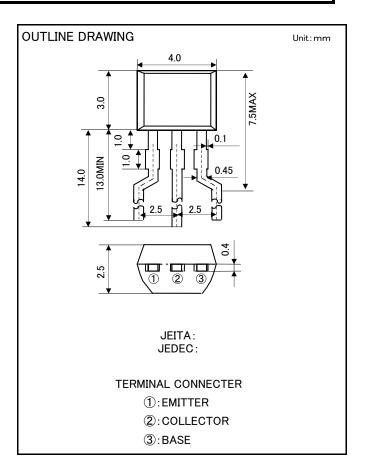
- lacktriangle High collector current. I_{CM} = 1.5A
- High gain band width product. fT= 100MHz typ
- High collecot dissipation. Pc= 600mW
- ●Excellent linearity of DC forward current gain.

APPLICATION

2 to 3.5W output low frequency amplify circuit of radio, cassette tape recorder, mini stereo.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter Ratings		Unit	
Vcво	V _{CBO} Collector to Base voltage		٧	
VEBO	Emitter to Base voltage	4	٧	
Vceo	Collector to Emitter voltage	25	V	
I_{C}	Collector current	1	Α	
I _{CM}	Peak collector current	1.5	Α	
P _c	Collector dissipation	600	mW	
T_{j}	Junction temperature	+150	ပ္	
T_{stg}	Storage temperature	−55 ~ +150	°C	



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Parameter	Test conditions	Limits			Unit
Parameter		Test conditions	Min	Тур	Max	Unit
V(BR)cB0	C to B break down voltage	I_{C} = 10 μ A , I_{E} =0mA	30	-	-	٧
V(BR)EBO	E to B break down voltage	$I_{\rm E}$ = 10 μ A , $I_{\rm C}$ =0mA	4	-	-	٧
V(BR)ceo	C to E break down voltage	I _C = 100 μ A , RBE= ∞	25	-	-	٧
ICBO	Collector cut off current	V_{CB} = 25 V , I_{E} = 0mA	-	-	1	μΑ
ĪEBO	Emitter cut off current	V $_{\rm EB}$ =2V , I $_{\rm C}$ = 0mA	-	-	1	μΑ
hFE※	DC forward current gain	$V_{CE} = 1V$, $I_{C} = 500$ mA	55	-	300	_
VCE(sat)	C to E Saturation Voltage	I $_{\rm C}$ =500mA , I $_{\rm B}$ = 25mA	_	_	0.5	٧
fT	Gain band width product	V _{CE} =6V , I _E = -10mA	_	100	_	MHz

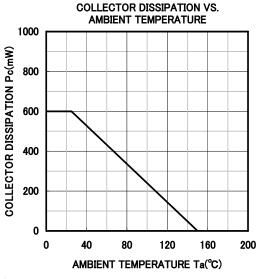
※) It shows hFE classification in right table.

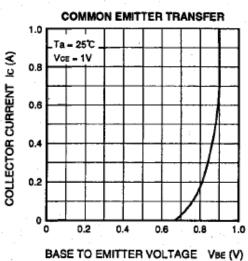
Item		С	D	Е	
	hFE item	55 ~ 110	90~180	150~300	

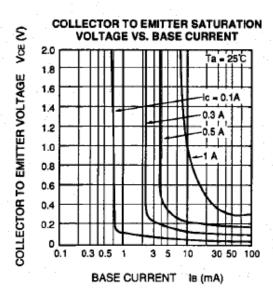
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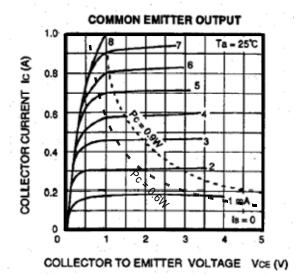
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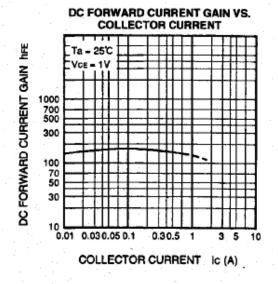
TYPICAL CHARACTERISTICS













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

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