〈SMALL-SIGNAL TRANSISTOR〉

ISC3249AS1

FOR SMALL TYPE COLOR TV CHROMA OUTPUT APPLICATION
SILICON NPN TRIPLE DIFFUSED TYPE

DESCRIPTION

ISC3249AS1 is a silicon NPN triple diffused transistor designed for color TV chroma output circuit, high voltage switching circuit application.

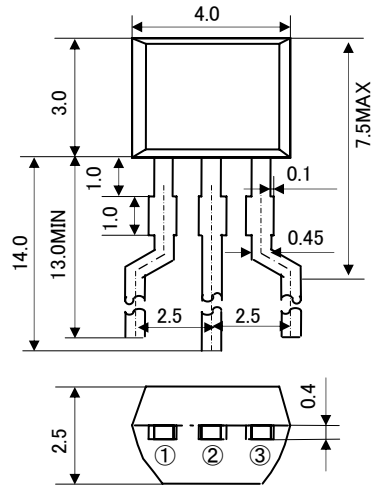
FEATURE

●High voltage. V_{CEo}=250V
●High gain width product. fT=80MHz (typ)
●Low Cob. Cob=3.5pF typ

APPLICATION

Small type color TV chroma output circuit, high voltage switching circuit.

OUTLINE DRAWING Unit:mm



JEITA:
JEDEC:

TERMINAL CONNECTER
①:EMITTER
②:COLLECTOR
③:BASE

MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	300	V
V_{EBO}	Emitter to Base voltage	5	V
V_{CEO}	Collector to Emitter voltage	250	V
I_C	Collector current	100	mA
P_c	Collector dissipation	600	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	−55～+150	℃

ELECTRICAL CHARACTERISTICS(Ta=25℃)

Parameter	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	I_C= 10μA , I_E =0mA	300	−	−	V
$V_{(BR)EBO}$	E to B break down voltage	I_E= 10μA , I_C =0mA	5	−	−	V
$V_{(BR)CEO}$	C to E break down voltage	I_C= 5mA , R_{BE}= ∞ , pulse measurement	250	−	−	V
ICBO	Collector cut off current	V_{CB}= 150V , I_E= 0mA	−	−	1	μA
hFE※	DC forward current gain	V_{CE} = 10V , I_C= 25mA	55	−	230	−
VCE(sat)	C to E Saturation Voltage	I_C=25mA , I_B= 2.5mA	−		1.5	V
fT	Gain band width product	V_{CE}= 10V , I_E= −10mA, f=10MHz	60	80	−	MHz
Cob	Collector output capacitance	V_{CB}=10V , I_E= 0mA, f=1MHz, triode measurement	−	3.5	−	pF

※) It shows hFE classification in right table.

Item	C	D	E
hFE item	55～110	90～180	150～230

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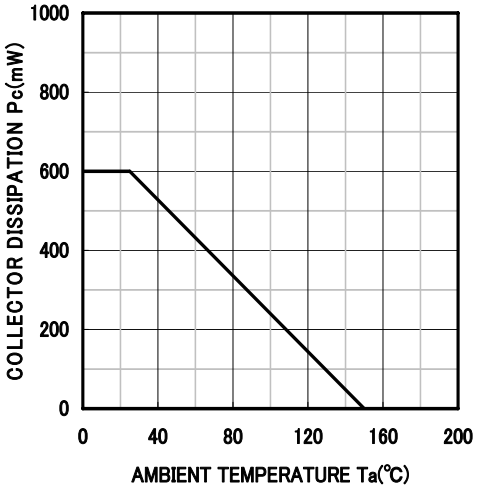
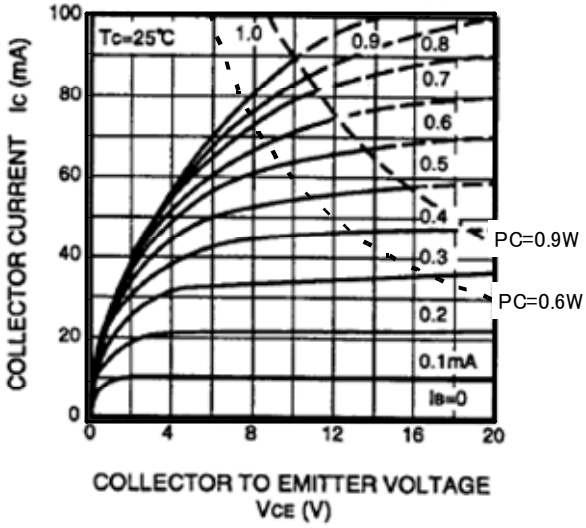
TYPICAL CHARACTERISTICS

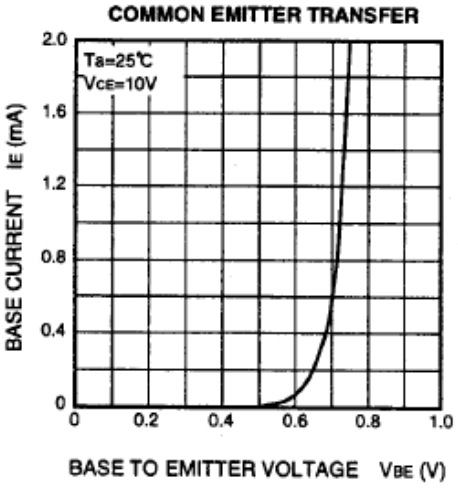
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



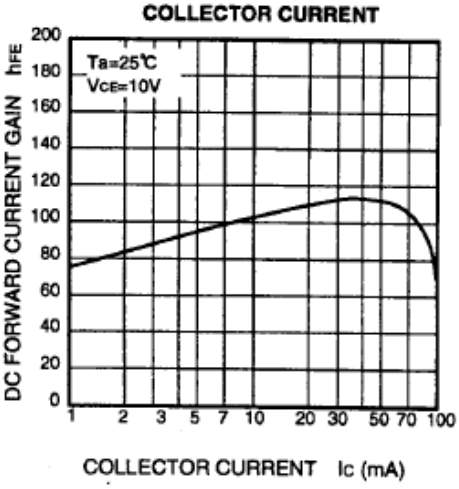
COMMON EMITTER OUTPUT



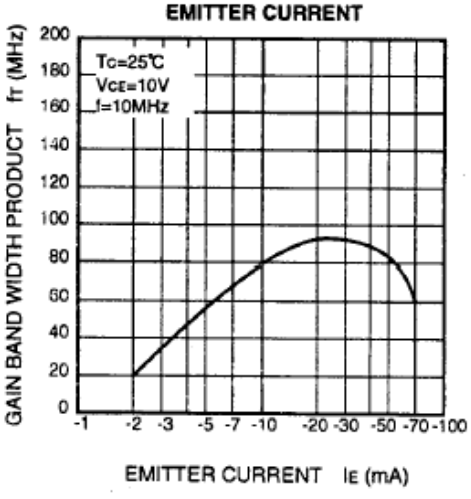
COMMON EMITTER TRANSFER



DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



ISAHAYA ELECTRONICS CORPORATION

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

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