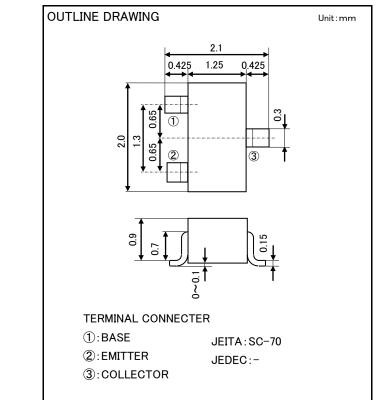
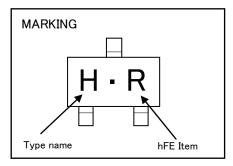
2SC4155A-T150

FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

AEC-Q101 Compliance





Parameter	Symbol	T		Limits		
		Test conditions	Min	Тур	Max	Unit
C to E breakdown voltage	V(BR)CEO	$I_{\rm C}$ =100 μ A , R _{BE} = ∞	50	_	_	V
Collector cut off current	Ісво	V_{CB} =50V , I_{E} =0mA	-	_	0.1	μA
Emitter cut off current	Іево	V _{EB} =4V , I _C =0mA	-	_	0.1	μA
DC forward current gain	hFE	V _{CE} =6V , I _C =1mA	120	(※)	560	-
DC forward current gain	hFE	$V_{CE}=6V$, $I_{C}=0.1$ mA	70	_	_	-
C to E Saturation voltage	VCE(sat)	$I_{\rm C}$ =100mA , $I_{\rm B}$ =10mA	-	_	0.3	V
Gain bandwidth product	fт	V _{CE} =6V , I _E =-10mA	-	200	_	MHz
Collector output capacitance	Cob	V_{CB} =6V , I_E =0 , f=1MHz	-	4	_	pF
Noise figure	NF	V_{CE} =6V , I_{E} =-0.1mA , f=1kHz , RG=2k Ω	-	—	15	dB

 $\ref{eq:heat}$) It shows hFE classification at right table.

Item	Q	R	S
hFE	120~270	180~390	270 ~ 560

MAXIMUM RATINGS(Ta=25°C)

DESCRIPTION

FEATURE

APPLICATION

amplify application.

2SC4155A is a mini package resin sealed

•Small collector to emitter saturation voltage

Excellent linearity of DC forward current gain
Super mini package for easy mounting

For Hybrid IC, Small type machine low frequency voltage

It is designed for low frequency voltage application.

 $V_{CE(sat)}=0.3V max(@Ic=100mA/IB=10mA)$

silicon NPN epitaxial transistor.

Parameter	Symbol	Ratings	Unit
Collector to Base voltage	Vсво	50	V
Emitter to Base voltage	Vево	6	V
Collector to Emitter voltage	VCEO	50	V
Collector current	Ic	200	mA
Collector dissipation	Pc	200	mW
Junction temperature	Tj	+150	°C
Storage temperature	Tstg	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

ISAHAYA ELECTRONICS CORPORATION

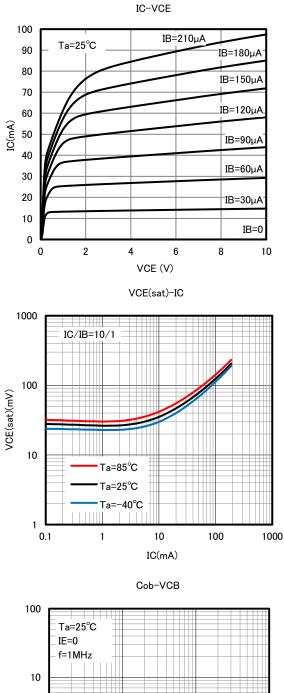
2SC4155A-T150

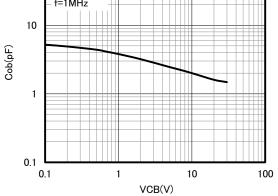
FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

IC-VBE 50 VCE=6V 40 30 IC (mA) 20 Ta=85°C Ta=25°C 10 Ta=−40°C 0 0.2 0 0.4 0.6 0.8 1 VBE(V) hFE-IC 10000 VCE=6V 1000 hFE(-) 100 Ta=85℃ Ta=25°C Ta=-40°C 10 0.1 10 100 1000 1 IC(mA) fT-IE 250 Ta=25°C VCE=6V 200 150 fT(MHz) 100 50 0 -0.1 -1 -10 -100

IE(mA)

TYPICAL CHARACTERISTICS

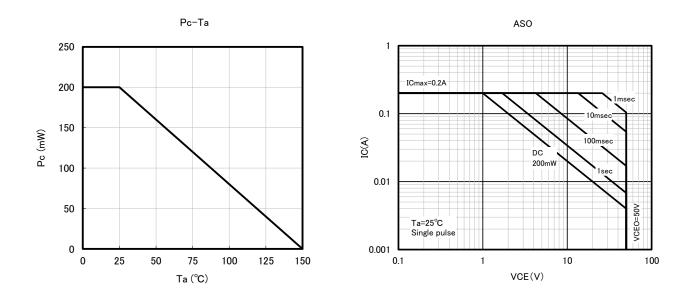




ISAHAYA ELECTRONICS CORPORATION

2SC4155A-T150

FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE



Keep safety first in your circuit designs!

•ISAHAYA Electronics Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (1) placement of substitutive, auxiliary, (2) use of non-farmable material or (3) prevention against any malfunction or mishap.

Notes regarding these materials

•These materials are intended as a reference to our customers in the selection of the ISAHAYA products best suited to the customer's application; they don't convey any license under any intellectual property rights, or any other rights, belonging ISAHAYA or third party. •ISAHAYA Electronics Corporation assumes no responsibility for any damage, or infringement of any third party's rights, originating in the use of any product data, diagrams, charts or circuit application examples contained in these materials.

-All information contained in these materials, including product data, diagrams and charts, represent information on products at the time of publication of these materials, and are subject to change by ISAHAYA Electronics Corporation without notice due to product improvements or other reasons. It is therefore recommended that customers contact ISAHAYA Electronics Corporation or an authorized ISAHAYA products distributor for the latest product information before purchasing product listed herein. ISAHAYA Electronics Corporation products are not designed or manufactured for use in a device or system that is used under circumstances in

ISAHAYA Electronics Corporation products are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact ISAHAYA Electronics Corporation or an authorized ISAHAYA products distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.

•The prior written approval of ISAHAYA Electronics Corporation is necessary to reprint or reproduce in whole or in part these materials. •If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination. Any diversion or re-export contrary to

the export control laws and regulations of Japan and/or the country of destination is prohibited. Please contact ISAHAYA Electronics Corporation or authorized ISAHAYA products distributor for further details on these materials or the products contained therein.