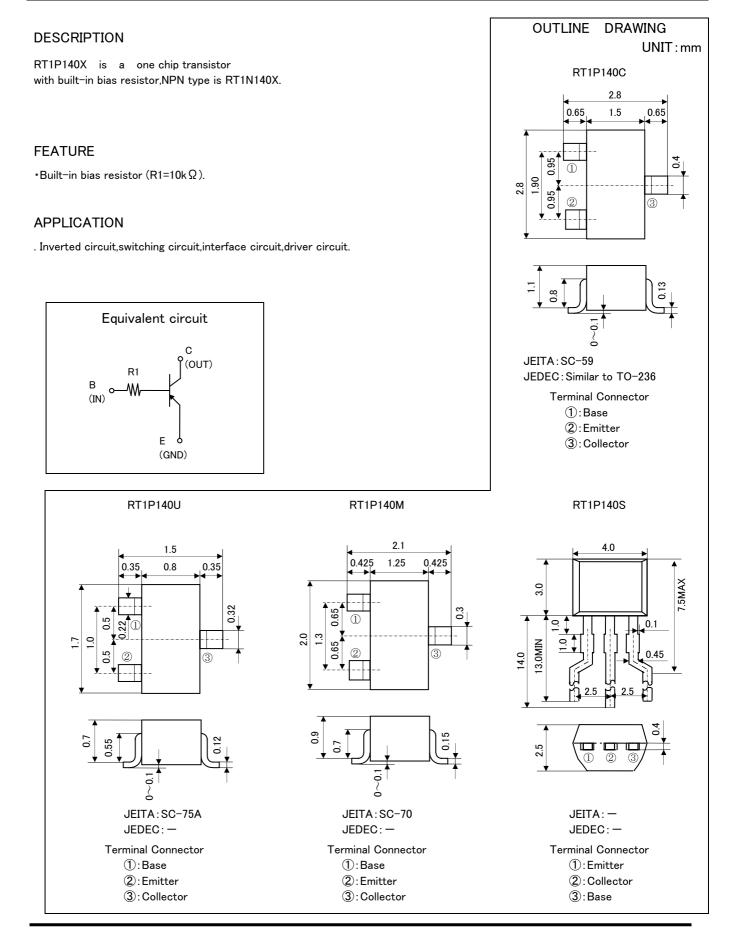
## **RT1P140X SERIES**

(Transistor)

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type



ISAHAYA ELECTRONICS CORPORATION

# RT1P140X SERIES

〈Transistor〉 Transistor With Resistor

For Switching Application Silicon PNP Epitaxial Type

### MARKING

RT1P140C RT1P140M RT1P140U	RT1P140S
P7 type name	type name Lot No.

### MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER -	RATING				
		RT1P140U	RT1P140M	RT1P140C	RT1P140S	UNIT
V <sub>CBO</sub>	Collector to Base voltage	-50				V
V <sub>EBO</sub>	Emitter to Base voltage	-6				V
V <sub>CEO</sub>	Collector to Emitter voltage	-50				V
Ι <sub>c</sub>	Collector current	-100				mA
I <sub>CM</sub>	Peak Collector current	-200			mA	
Pc	Collector dissipation(Ta=25°C)	150	20	00	450	mW
Tj	Junction temperature	+150				°C
Tstg	Storage temperature	-55~+150				°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL PARAMETER	TEST CONDITION	LIMIT			UNIT	
	TEST CONDITION	MIN	TYP	MAX	UNIT	
$V_{(BR)CEO}$	C to E break down voltage	$I_{c} = -100 \mu A, R_{BE} = \infty$	-50	—	1	V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-50V, I <sub>E</sub> =0	—	—	-0.1	μA
I <sub>EBO</sub>	Emitter cut off current	$V_{EB}$ =-5V, I <sub>c</sub> =0	—	—	-0.1	μA
h <sub>FE</sub>	DC forward current gain	V <sub>cE</sub> =-5V, I <sub>c</sub> =-1mA	100	—	1	—
$V_{CE(sat)}$	C to E saturation voltage	I <sub>c</sub> =–10mA, I <sub>B</sub> =–0.5mA	—	—	-0.3	V
R <sub>1</sub>	Input resistor	-	7	10	13	kΩ
f <sub>⊤</sub>	Gain band width product	V <sub>ce</sub> =-6V, I <sub>e</sub> =10mA	—	150	1	MHz

## **RT1P140X SERIES**

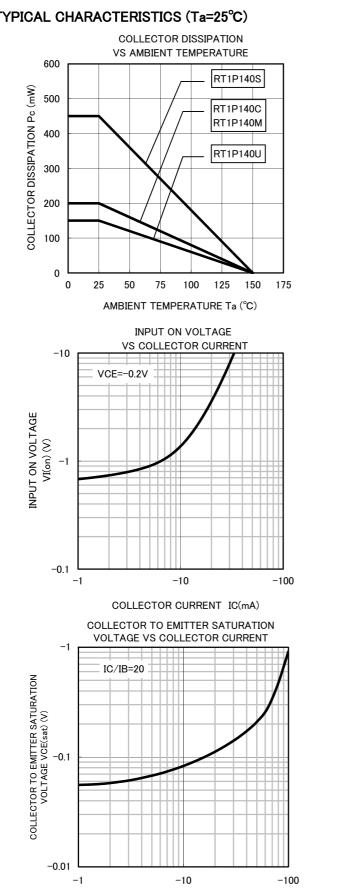
1000

VCE=-5V

(Transistor) Transistor With Resistor For Switching Application

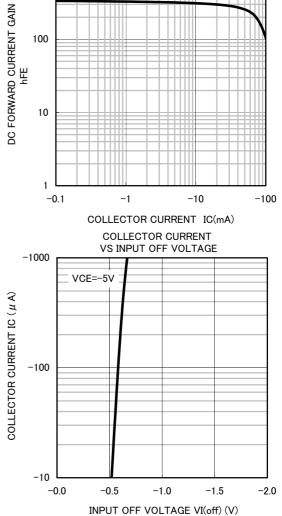
Silicon PNP Epitaxial Type

DC FORWARD CURRENT GAIN VS COLLECTOR CURRENT



COLLECTOR CURRENT IC(mA)

#### TYPICAL CHARACTERISTICS (Ta=25°C)



ISAHAYA ELECTRONICS CORPORATION

## ISAHAYA ELECTRONICS CORPORATION

#### 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 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.