imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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Transistors with Built-in Resistor DRC3115T0L

DRC3115T0L Silicon NPN epitaxial planar type

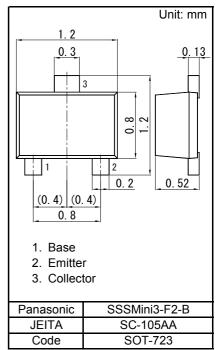
For digital circuits Complementary to DRA3115T DRC9115T in SSSMini3 type package

Features

- · High forward current transfer ratio hFE with excellent linearity
- Low collector-emitter saturation voltage Vce(sat)
- Halogen-free / RoHS compliant
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: NT

Packaging

Embossed type (Thermo-compression sealing) : 10 000 pcs / reel (standard)



Internal Connection						
		o E				
Resistance value	R1	100	kΩ			

■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	VCBO	50	V
Collector-emitter voltage (Base open)	VCEO	50	V
Collector current	IC	100	mA
Total power dissipation	PT	100	mW
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	С°

■ Electrical Characteristics Ta = 25 °C ± 3 °C

Symbol	Conditions Min Typ		Max	Unit					
VCBO	IC = 10 μA, IE = 0	50			V				
VCEO	IC = 2 mA, IB = 0	50			V				
ICBO	VCB = 50 V, IE = 0			0.1	μA				
ICEO	VCE = 50 V, IB = 0			0.5	μA				
IEBO	VEB = 6 V, IC = 0			0.01	mA				
hFE	VCE = 10 V, IC = 5 mA	160		460	-				
VCE(sat)	IC = 10 mA, IB = 0.5 mA			0.25	V				
Vi(on)	VCE = 0.2 V, IC = 5 mA	4.3			V				
Vi(off)	VCE = 5 V, IC = 100 µA			0.4	V				
R1		-30%	100	+30%	kΩ				
	Symbol VCBO ICBO ICEO IEBO hFE VCE(sat) Vi(on) Vi(off)	Symbol Conditions VCBO IC = 10 μ A, IE = 0 VCEO IC = 2 mA, IB = 0 ICBO VCB = 50 V, IE = 0 ICEO VCE = 50 V, IB = 0 IBO VEB = 6 V, IC = 0 hFE VCE = 10 V, IC = 5 mA VCe(sat) IC = 10 mA, IB = 0.5 mA Vi(on) VCE = 5 V, IC = 100 μ A	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $				

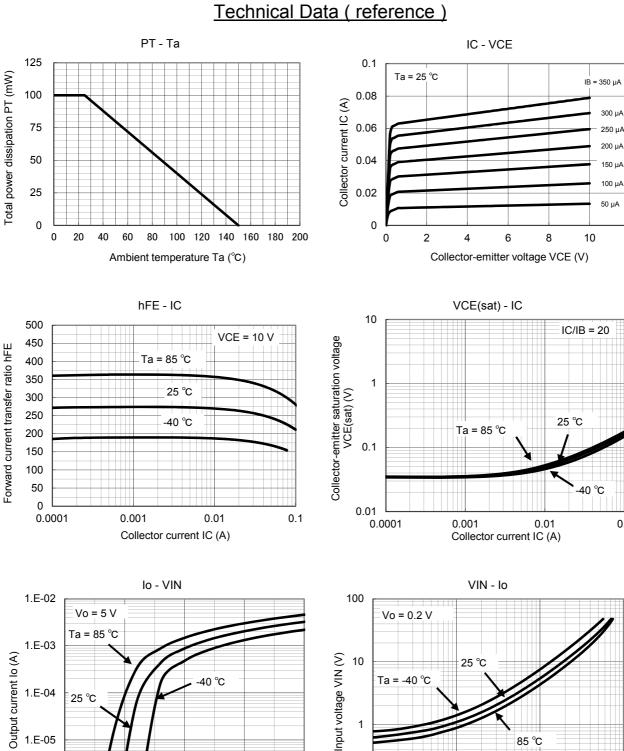
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

Panasonic

Transistors with Built-in Resistor DRC3115T0L

12

0.1



0.1

0.0001

0.001

0.01

Output current lo (A)

2

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0.1

Established : 2009-10-27 Revised : 2014-03-27

1.E-06

0

0.5

1

Input voltage VIN (V)

1.5



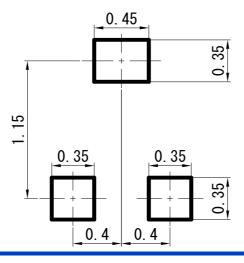
SSSMini3-F2-B

Transistors with Built-in Resistor DRC3115T0L

Unit: mm

1.20 ± 0.05 **0. 13**^{+0. 05} 0. 2 0<u>. 30^{+0.05}</u> 3 0.80 ± 0.05 1.20 ± 0.05 ີ່ເບີ 2 1 **0. 20**^{+0. 05} -0. 02 0.20 ± 0.05 (0.4) (0.4) 0.80 ± 0.05 (5°) 27) 52 ± 0.03 ġ o' 0 to 0.05

Land Pattern (Reference) (Unit: mm)



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Established : 2009-10-27 Revised : 2014-03-27

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