

	<h1>Tentative</h1>	DSC4005	
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DSC4005

Silicon NPN epitaxial planar type

For general amplifier

Marking Symbol : C3

Package Code : NS-B1-B-B

Absolute Maximum Ratings $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	VCBO	60	V
Collector-emitter voltage (Base open)	VCEO	50	V
Emitter-base voltage (Collector open)	VEBO	6	V
Collector current	IC	200	mA
Peak collector current	ICp	300	mA
Collector power dissipation	Pc	300	mW
Junction temperature	Tj	150	$^\circ\text{C}$
Storage temperature	Tstg	-55 to +150	$^\circ\text{C}$

Pin name	1.	Emitter
	2.	Collector
	3.	Base

Electrical Characteristics $T_a = 25\text{ }^\circ\text{C} \pm 3\text{ }^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	VCEO	IC = 100 μA , IB = 0	50			V
Collector-base cutoff current (Emitter open)	ICBO	VCB = 60 V, IE = 0			0.1	μA
Emitter-base cutoff current (Collector open)	IEBO	VEB = 6 V, IC = 0			0.1	μA
Forward current transfer ratio ^{*1}	hFE1	VCE = 6 V, IC = 1 mA	150		390	-
Forward current transfer ratio	hFE2	VCE = 6 V, IC = 0.1mA	90			-
Collector-emitter saturation voltage	VCE(sat)	IC = 100 mA, IB = 10 mA			0.3	V
Transition frequency	fT	VCE = 6 V, IC = 10 mA		200		MHz
Collector output capacitance (Common base, input open circuited)	Cob	VCB = 6 V, IE = 0, f = 1 MHz		3.5		pF

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

*1: Rank classification

Code	R	S	0
Rank	R	S	No-rank
hFE1	150 to 270	200 to 390	150 to 390
Marking symbol	C3R	C3S	C3

Product of no-rank is not classified and have no marking symbol for rank.

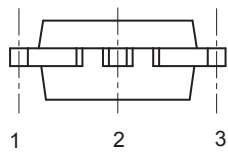
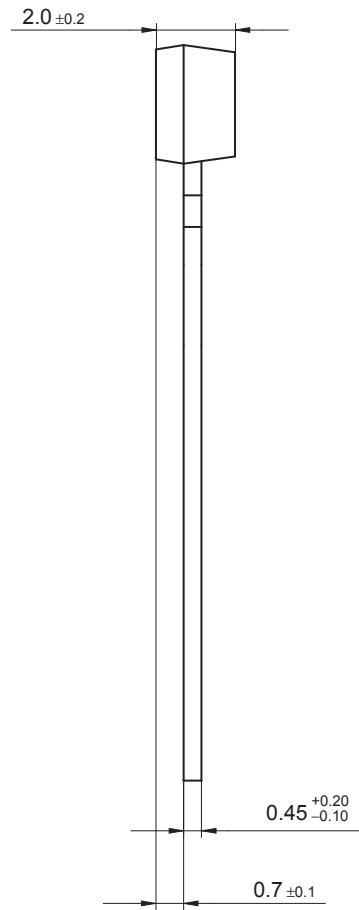
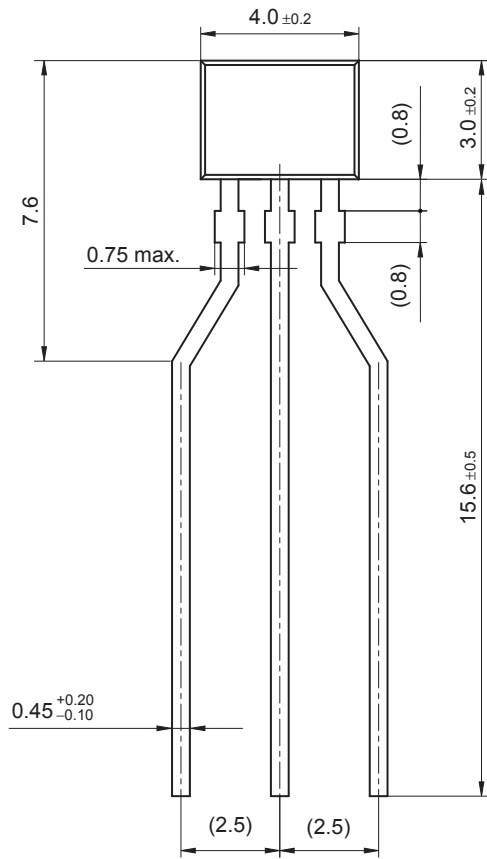
Packing

Radial type : 5 000 pcs / carton

2010.2.23	2010.9.10	
Prepared	Revised	

NS-B1-B-B

Unit: mm



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