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April 1st, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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2SC4308

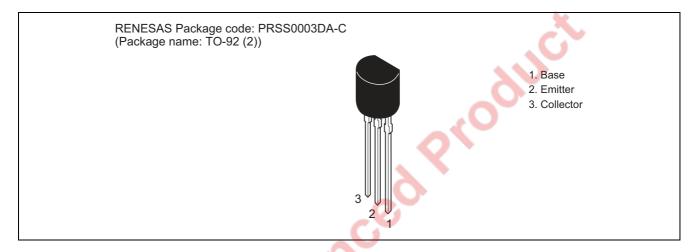
Silicon NPN Epitaxial Planar

REJ03G0723-0200 (Previous ADE-208-1103) Rev.2.00 Aug.10.2005

Application

VHF Wide band amplifier

Outline



Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Ratings	Unit	
Collector to base voltage	V_{CBO}	30	V	
Collector to emitter voltage	$V_{\sf CEO}$	20	V	
Emitter to base voltage	V_{EBO}	3	V	
Collector current	Ic	300	mA	
Collector peak current	i _{C (peak)}	500	mA	
Collector power dissipation	Pc	600	mW	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

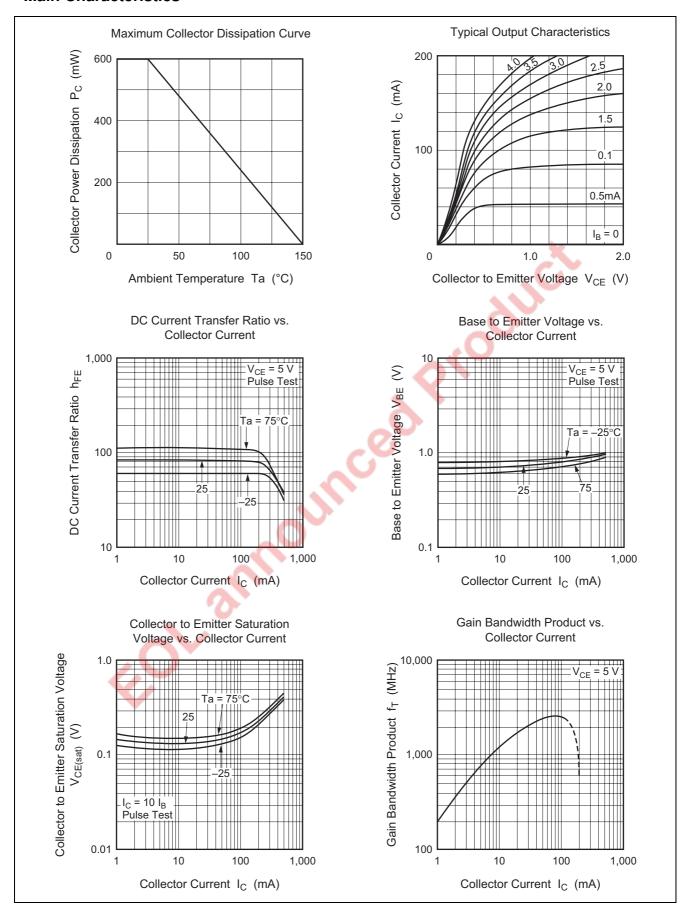
Electrical Characteristics

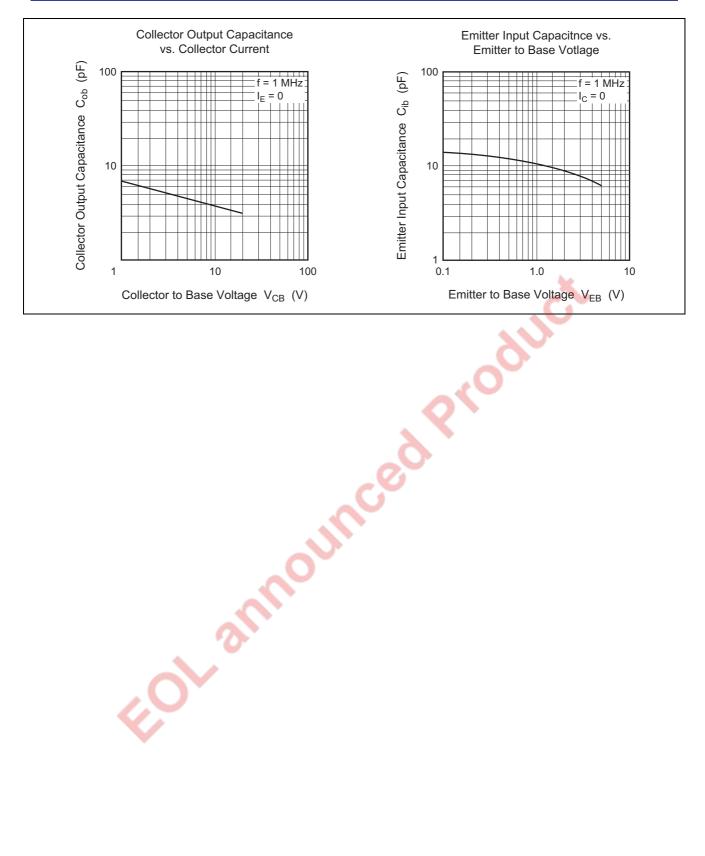
 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	30	_	_	V	$I_C = 100 \propto A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	20	_	_	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Collector cutoff current	I _{CBO}	_	_	1	∞A	$V_{CB} = 25 \text{ V}, I_{E} = 0$
Emitter cutoff current	I _{EBO}	_	_	10	∞A	$V_{EB} = 3 \text{ V}, I_{E} = 0$
DC current transfer ratio	h _{FE}	50	_	200		$V_{CE} = 5 \text{ V}, I_{C} = 50 \text{ mA}$
Gain bandwidth product	f _T	1.5	2.5	_	GHz	$V_{CE} = 5 \text{ V}, I_{C} = 50 \text{ mA}$
Collector output capacitance	Cob	_	4.0	_	рF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

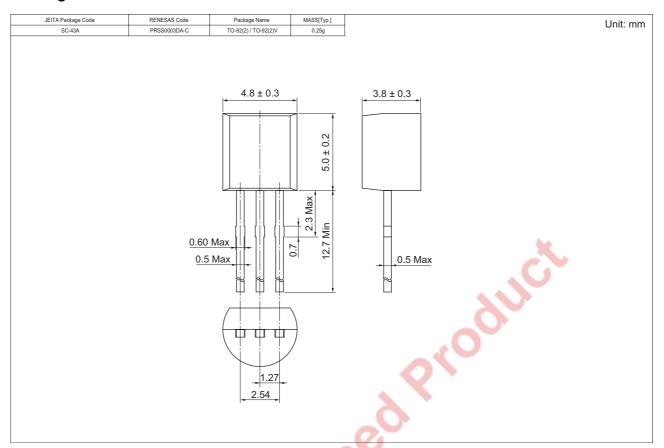


Main Characteristics





Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC4308TZ-E	2500	Hold Box, Radial Taping

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