

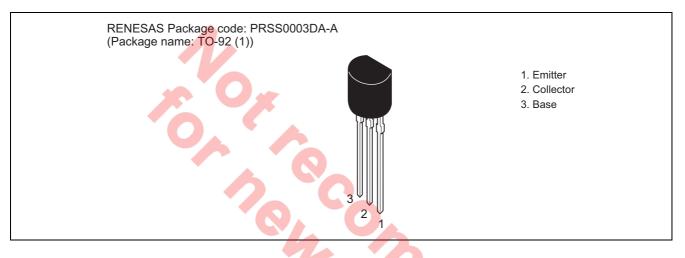
Silicon NPN Epitaxial

REJ03G0708-0300 (Previous ADE-208-1078A) Rev.3.00 Aug.10.2005

Application

Low frequency amplifier

Outline



Absolute Maximum Ratings

			$(Ta = 25^{\circ}C)$
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	90	V
Collector to emitter voltage	V _{CEO}	90	V
Emitter to base voltage	V _{EBO}	5	V
Collector current	Ι _C	100	mA
Emitter current	Ι _Ε	-100	mA
Collector power dissipation	Pc	400	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

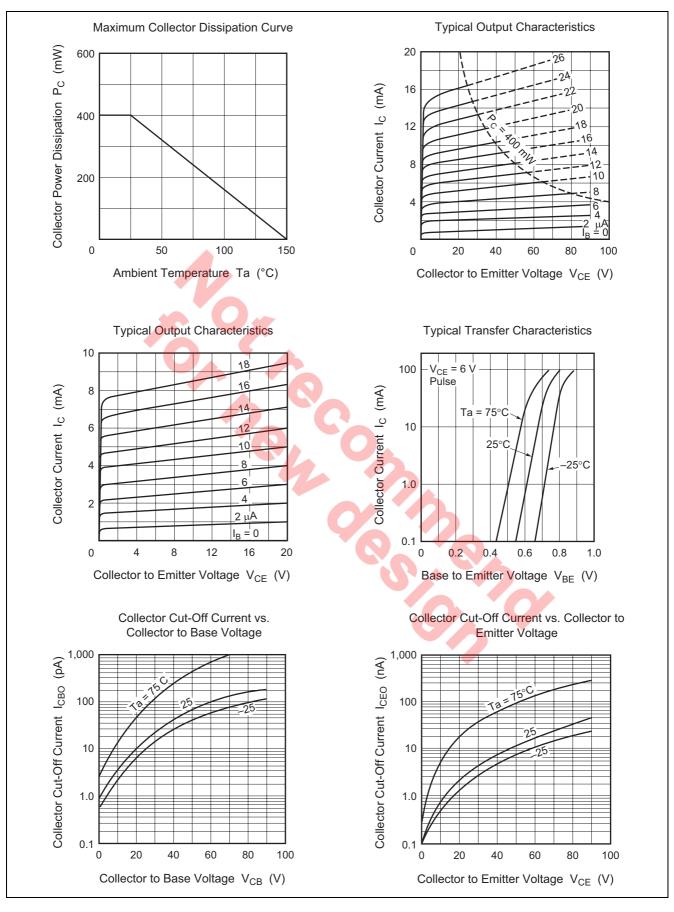


Electrical Characteristics

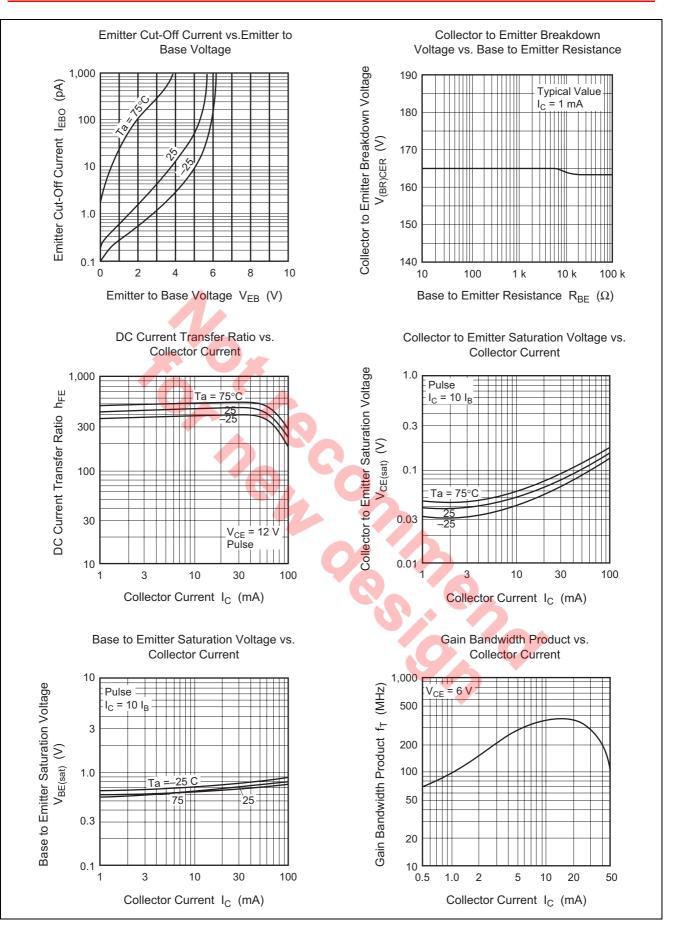
						$(Ta = 25^{\circ}C)$	
Item	Symbol	Min	Тур	Max	Unit	Test conditions	
Collector to base breakdown voltage	V _{(BR)CBO}	90	_	_	V	$I_{C} = 10 \ \mu A, \ I_{E} = 0$	
Collector to emitter breakdown voltage	V _{(BR)CEO}	90	_	_	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$	
Emitter to base breakdown voltage	V _{(BR)EBO}	5	_	_	V	$I_E = 10 \ \mu A, \ I_C = 0$	
Collector cutoff current	I _{СВО}	—	_	0.1	μΑ	$V_{CB} = 70 \text{ V}, I_E = 0$	
Emitter cutoff current	I _{EBO}	—	_	0.1	μΑ	$V_{EB} = 2 V, I_C = 0$	
DC current transfer ratio	h _{FE}	400	_	800		$V_{CE} = 12 \text{ V}, \text{ I}_{C} = 2 \text{ mA}$	
Collector to emitter saturation voltage	V _{CE(sat)}	—	0.05	0.10	V	$I_{C} = 10 \text{ mA}, I_{B} = 1 \text{ mA}$	
Base to emitter saturation voltage	V _{BE(sat)}	—	0.7	1.0	V		
Gain bandwidth product	f⊤	—	310	_	MHz	$V_{CE} = 6 V, I_C = 10 mA$	
Collector output capacitance	Cob	_	3		pF	$V_{CB} = 10 \text{ V}, I_E = 0,$	
						f = 1 MHz	



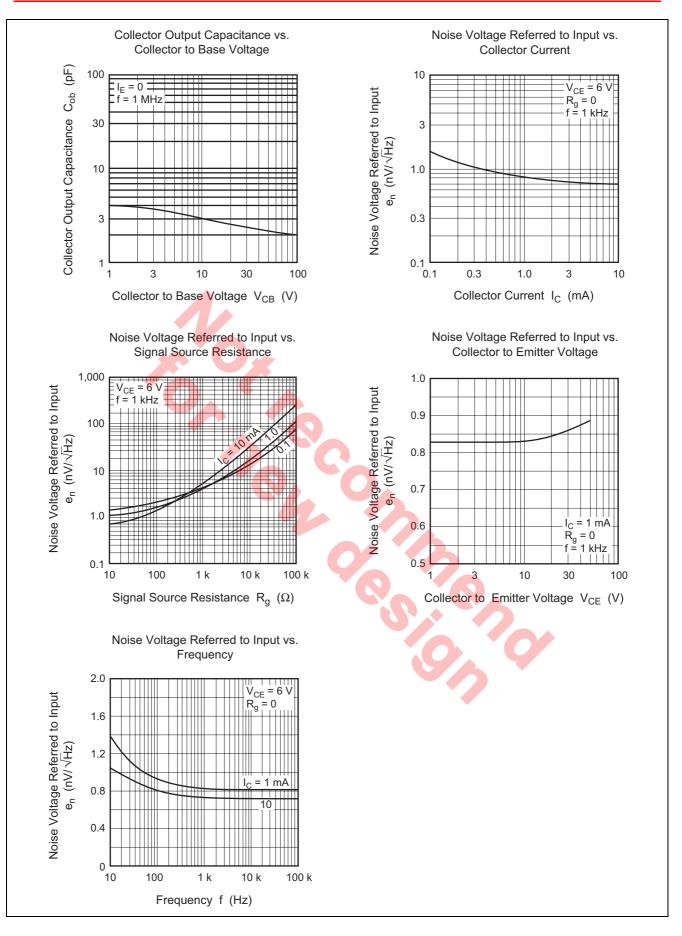
Main Characteristics





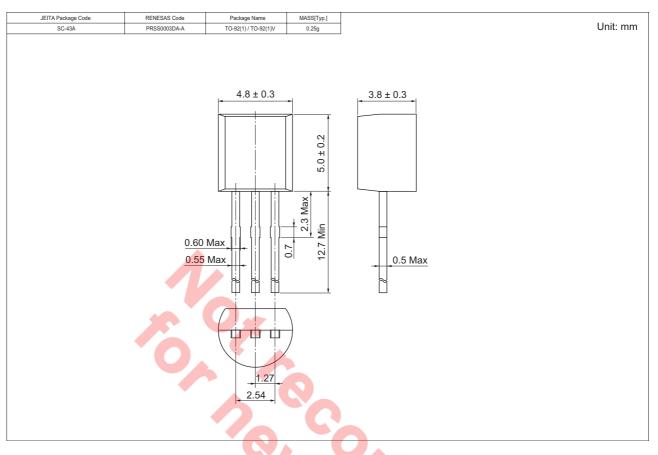








Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SC2853ETZ-E	2500	Hold Box, Radial Taping

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.



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