

# 2SB739

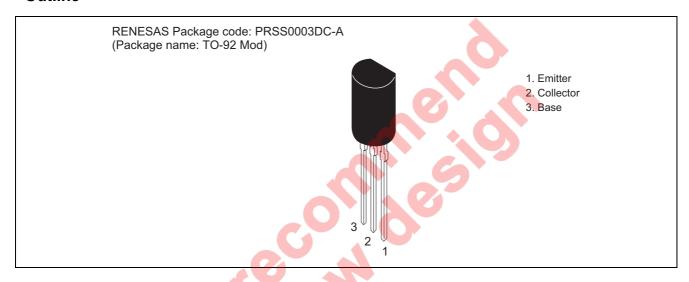
# Silicon PNP Epitaxial

REJ03G0650-0200 (Previous ADE-208-1030) Rev.2.00 Aug.10.2005

### **Application**

- Low frequency power amplifier
- Complementary pair with 2SD787 and 2SD788

#### **Outline**



# **Absolute Maximum Ratings**

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

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-20	V
Collector to emitter voltage	$V_{\sf CEO}$	-20	V
Emitter to base voltage	$V_{EBO}$	-6	V
Collector current	Ic	-2	А
Collector power dissipation	Pc	0.9	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

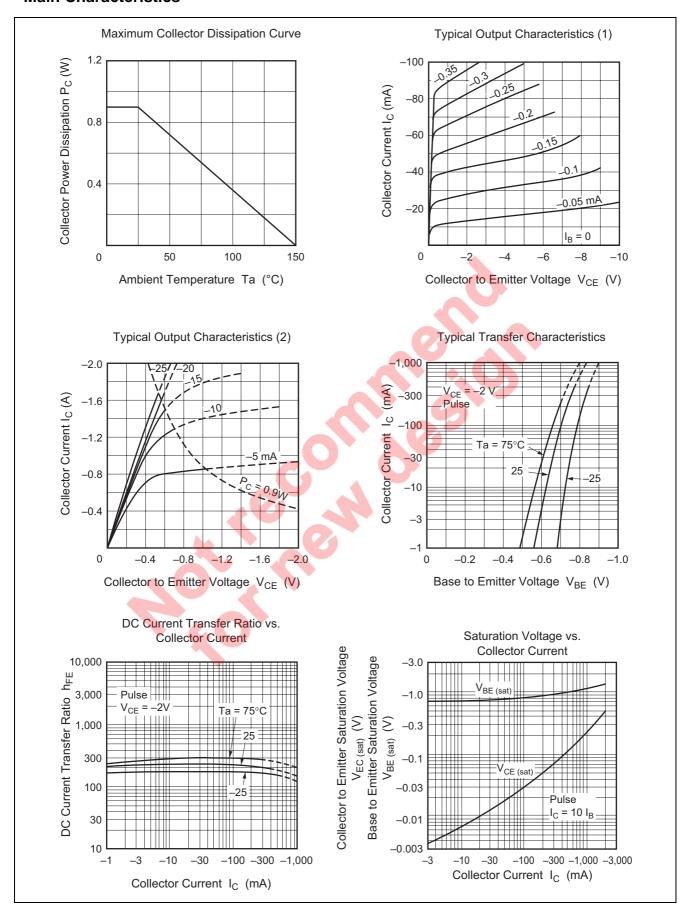
#### **Electrical Characteristics**

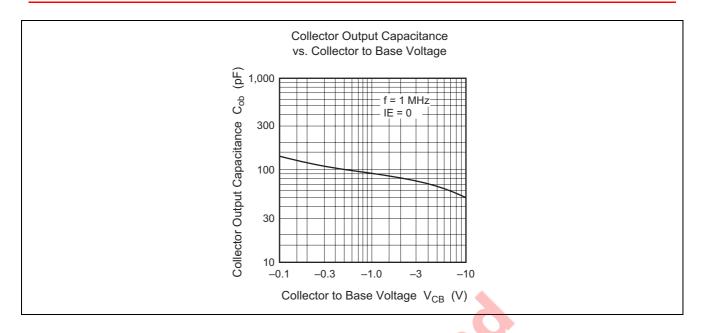
 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-20	_	_	V	$I_C = -10 \ \mu A, \ I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-20	_	_	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-6	_	_	V	$I_E = -10 \ \mu A, \ I_C = 0$
Collector cutoff current	I <sub>CBO</sub>		_	-2	μΑ	$V_{CB} = -16 \text{ V}, I_E = 0$
Emitter cutoff current	I <sub>EBO</sub>	_	_	-0.2	μΑ	$V_{EB} = -6 \text{ V}, I_C = 0$
DC current transfer ratio	h <sub>FE</sub>	160	_	320		$V_{CE} = -2 \text{ V}, I_{C} = -0.1 \text{ A}$
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	_	_	-0.3	V	$I_C = -1 A$ , $I_B = -0.1 A$
Gain bandwidth product	f⊤	_	150	_	MHz	$V_{CE} = -2 \text{ V}, I_{C} = -10 \text{ mA}$
Collector output capacitance	Cob	_	50	_	pF	$V_{CB} = -10 \text{ V}, I_E = 0,$
						f = 1 MHz

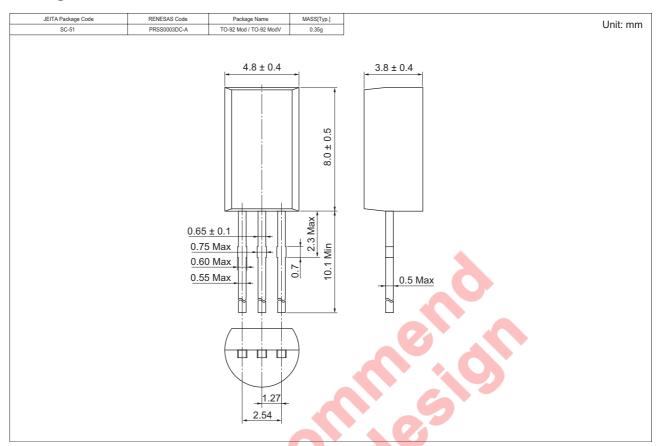


#### **Main Characteristics**





## **Package Dimensions**



## **Ordering Information**

Part Name	Quantity		Shipping Container
2SB739CTZ-E	2500	Hold E	Box, Radial Taping

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