

## 2SC1921

Silicon NPN Triple Diffused

REJ03G0695-0200  
 (Previous ADE-208-1060)  
 Rev.2.00  
 Aug.10.2005

### Application

- High frequency high voltage amplifier
- Video output

### Outline

RENESAS Package code: PRSS0003DC-A  
 (Package name: TO-92 Mod)



1. Emitter
2. Collector
3. Base

### Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	250	V
Collector to emitter voltage	$V_{CEO}$	200	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	50	mA
Collector power dissipation	$P_C$	600	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

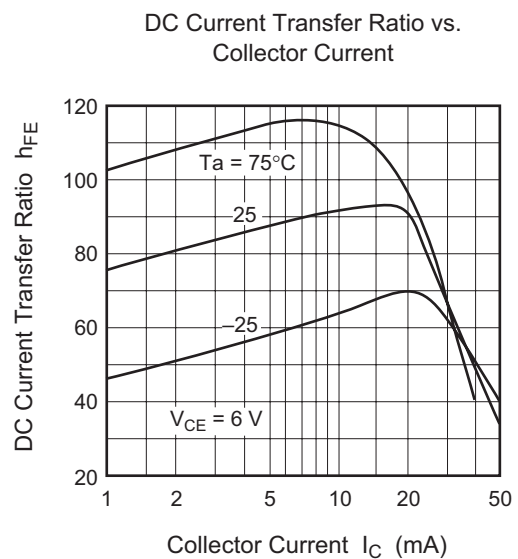
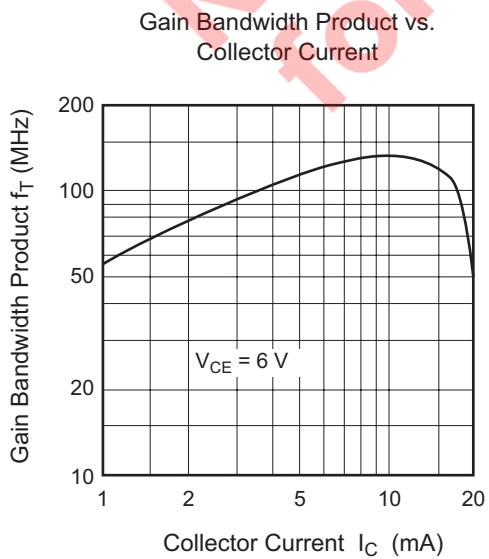
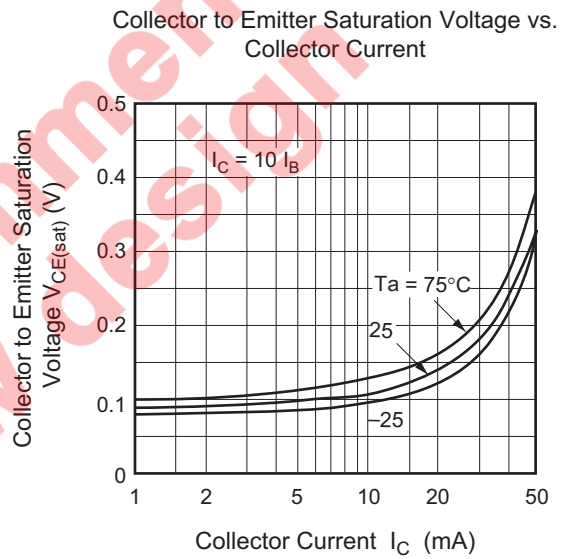
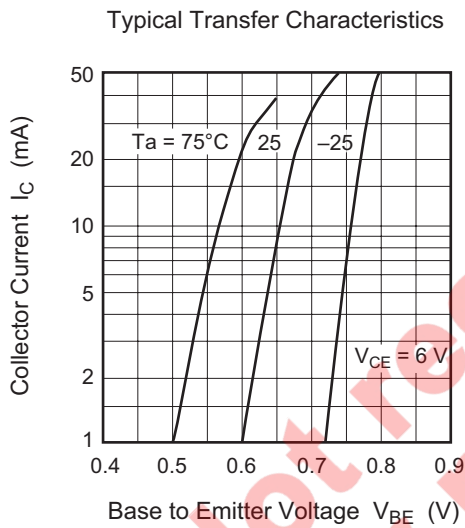
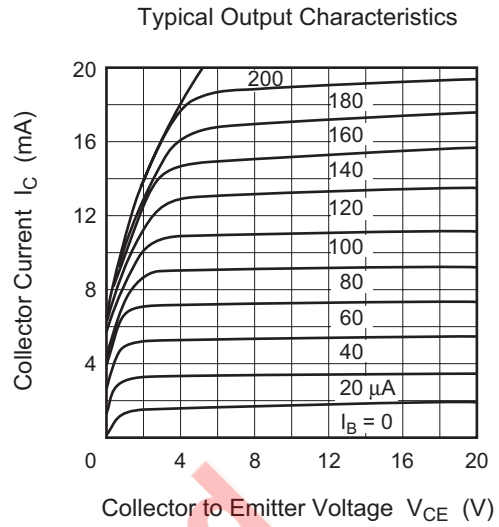
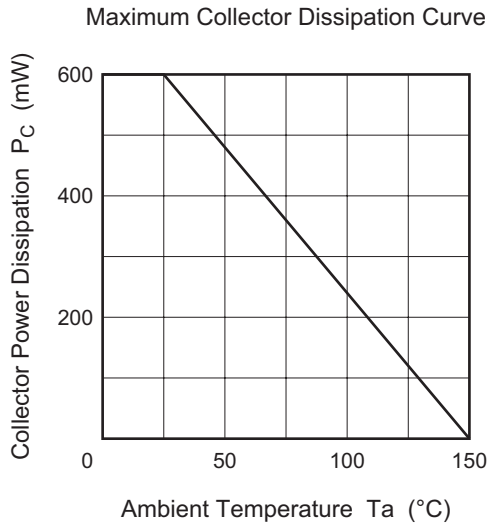
## Electrical Characteristics

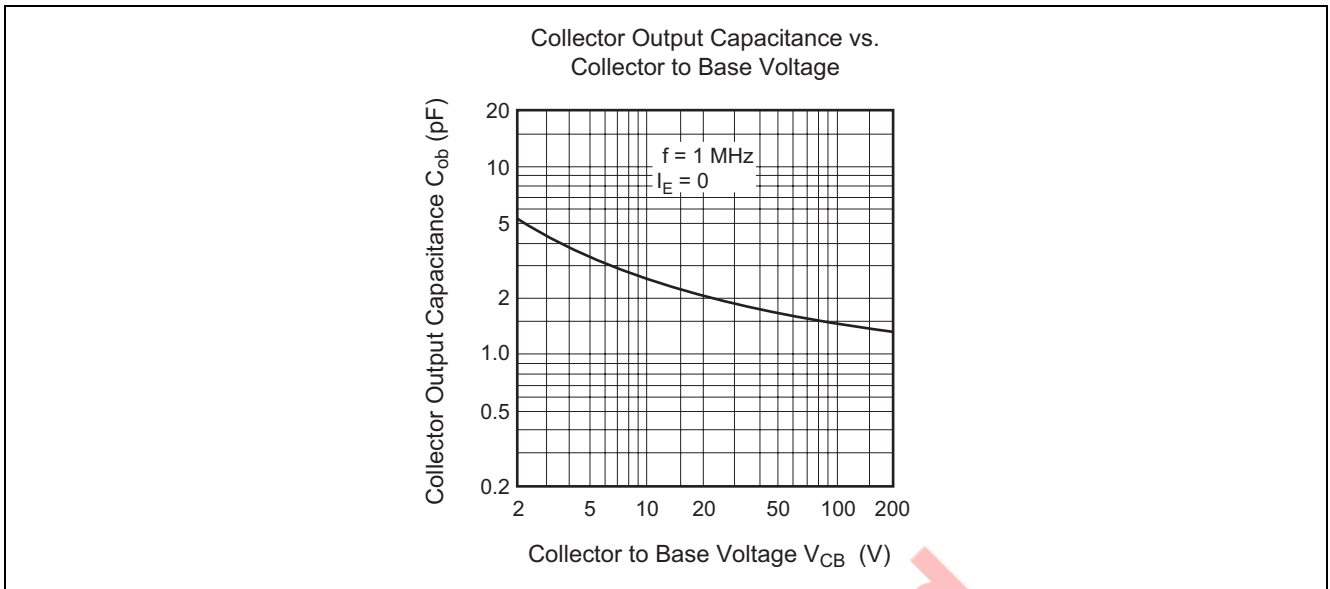
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	250	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	200	—	—	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	$I_{CEO}$	—	—	1.0	$\mu A$	$V_{CE} = 120 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	$h_{FE}$	30	—	300		$V_{CE} = 6 \text{ V}, I_C = 10 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.0	V	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$
Gain bandwidth product	$f_T$	60	130	—	MHz	$V_{CE} = 6 \text{ V}, I_C = 10 \text{ mA}$
Collector output capacitance	$C_{ob}$	—	3	4	pF	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

Not recommend  
for new design

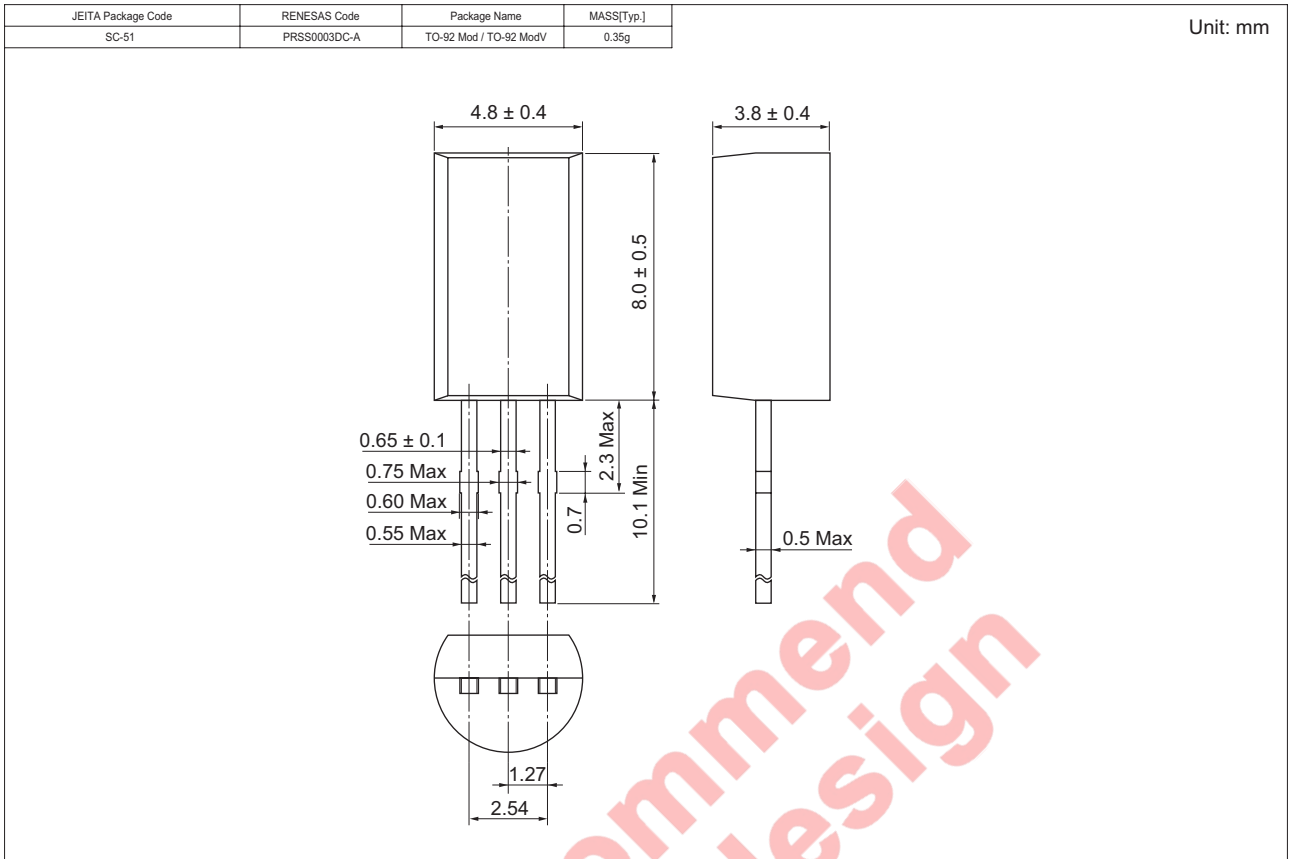
Main Characteristics





Not recommended  
for new design

### Package Dimensions



### Ordering Information

Part Name	Quantity	Shipping Container
2SC1921TZ-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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