

2SD2213

Silicon NPN Epitaxial, Darlington

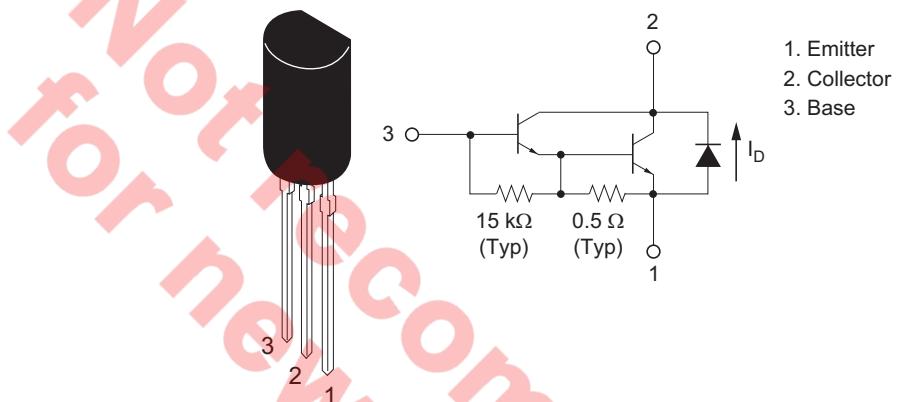
REJ03G0807-0200
 (Previous ADE-208-1165)
 Rev.2.00
 Aug.10.2005

Application

Low frequency power amplifier

Outline

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



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	150	V
Collector to emitter voltage	V _{CEO}	80	V
Emitter to base voltage	V _{EBO}	8	V
Collector current	I _C	1.5	A
Collector peak current	i _C (peak)	3	A
Collector power dissipation	P _C	0.9	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C
E to C diode forward current	I _D	1.5	A

Electrical Characteristics

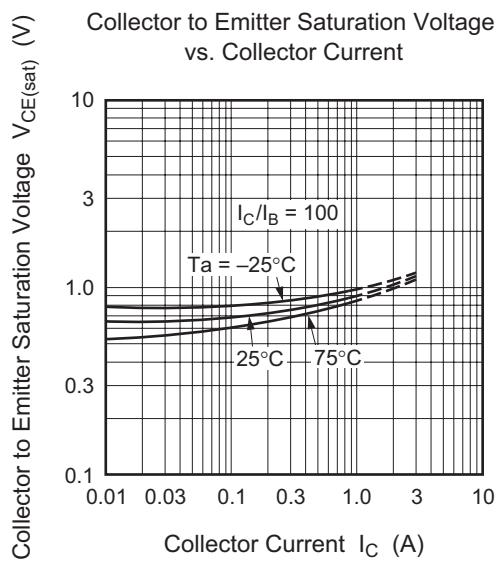
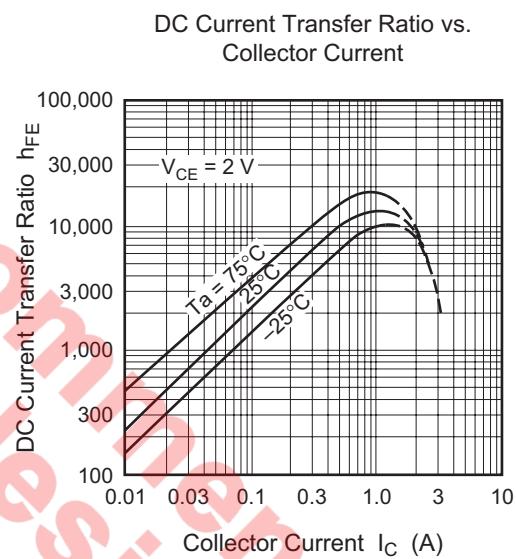
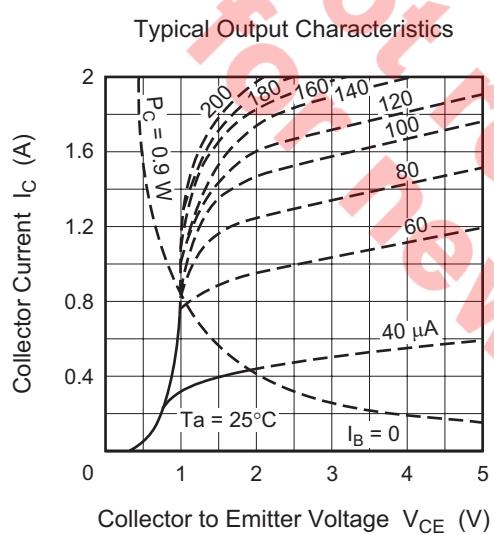
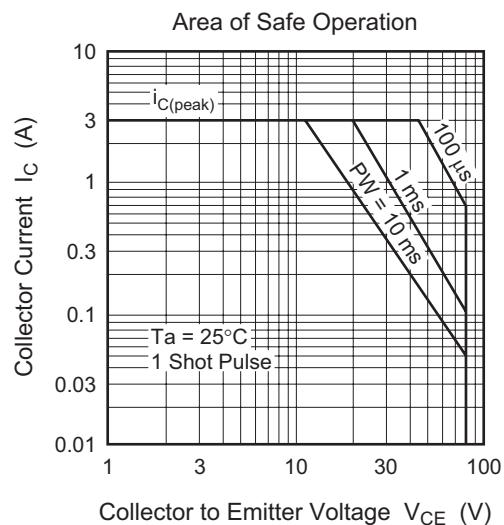
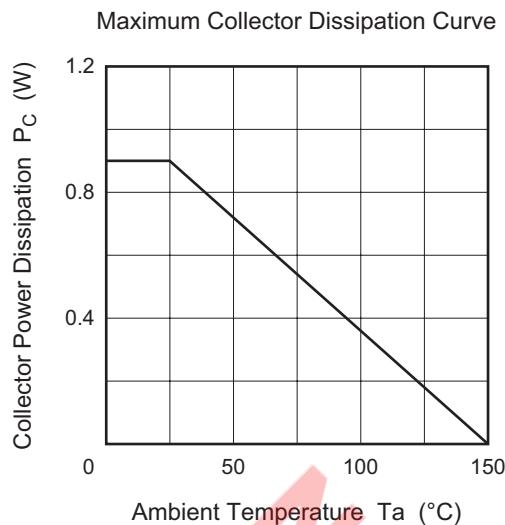
(Ta = 25°C)

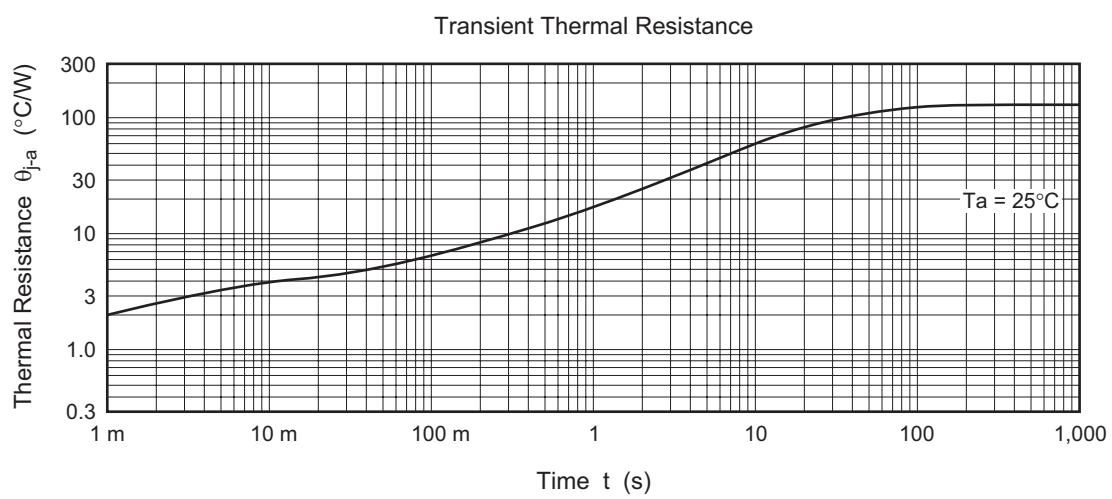
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	150	—	—	V	I _C = 1 mA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	80	—	—	V	I _C = 10 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	8	—	—	V	I _E = 50 mA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	5.0	μ A	V _{CB} = 120 V, I _E = 0
	I _{CEO}	—	—	5.0	μ A	V _{CE} = 65 V, I _E = ∞
DC current transfer ratio	h _{FE}	2000	—	—		V _{CE} = 2 V, I _C = 0.15 A ^{*1}
	h _{FE}	5000	—	30000		V _{CE} = 2 V, I _C = 1 A ^{*1}
	h _{FE}	1000	—	—		V _{CE} = 2 V, I _C = 1.5 A ^{*1}
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	1.5	V	I _C = 1 A ^{*1} , I _B = 1 mA
Base to emitter saturation voltage	V _{BE(sat)}	—	—	2.0	V	I _C = 1 A ^{*1} , I _B = 1 mA
E to C diode forward voltage	V _D	—	—	3.0	V	I _D = 1.5 A ^{*1}

Note: 1. Pulse test

Not recommended
for new design

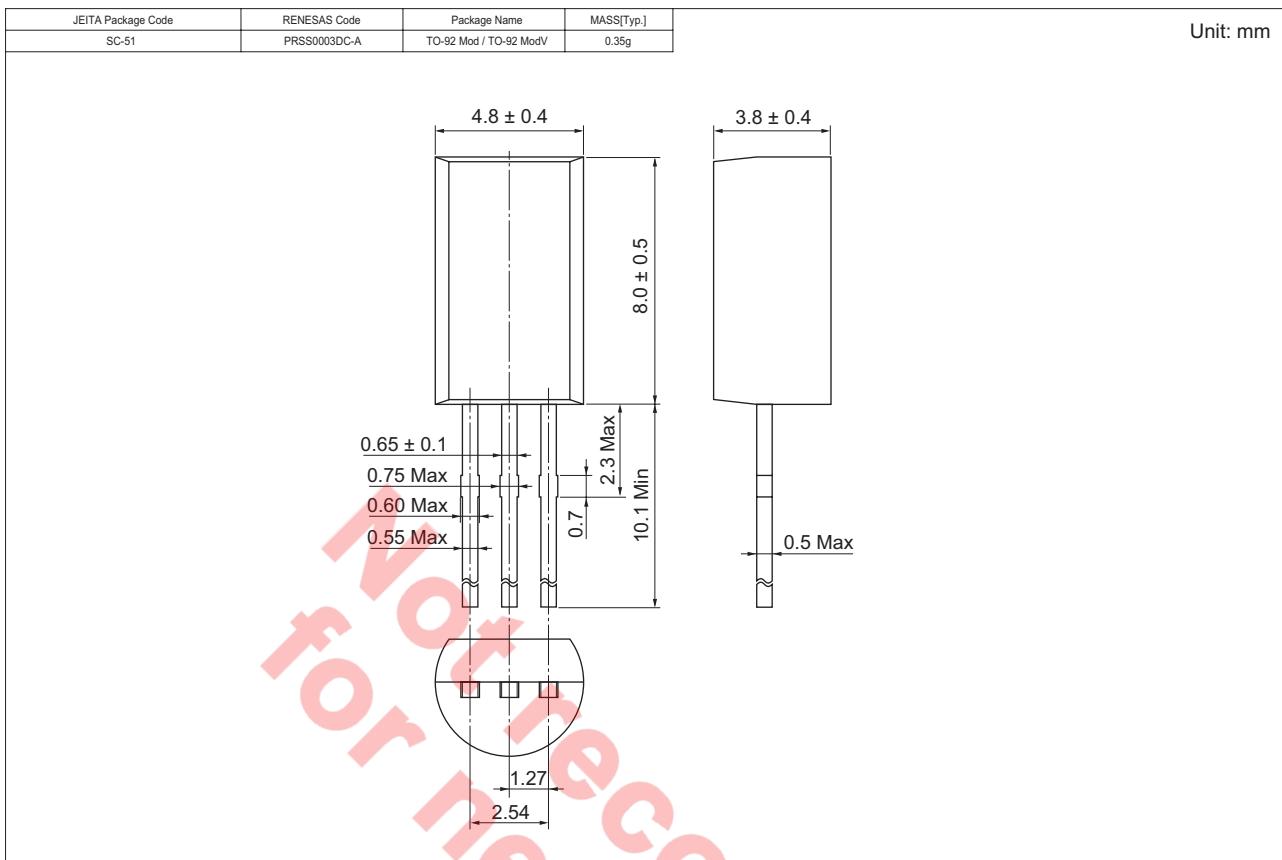
Main Characteristics





Not recommended for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SD2213TZ	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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