

# 2SC1515(K)

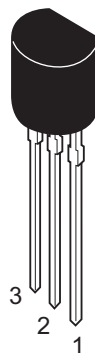
Silicon NPN Triple Diffused

REJ03G0689-0200  
(Previous ADE-208-1055)  
Rev.2.00  
Aug.10.2005

## Application

High voltage switching

## Outline

RENESAS Package code: PRSS0003DA-A  
(Package name: TO-92 (1))

1. Emitter
2. Collector
3. Base

## Absolute Maximum Ratings

(Ta = 25°C)

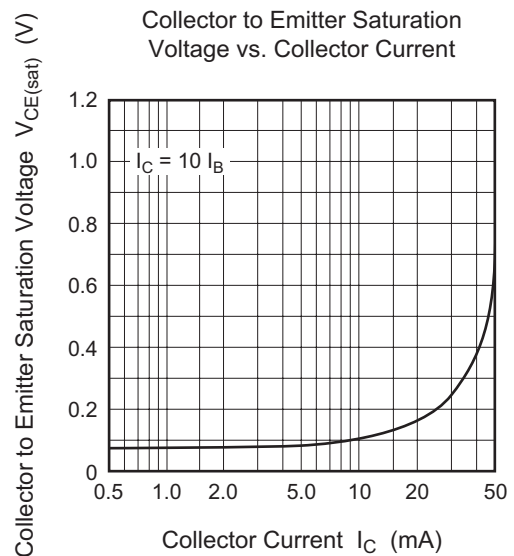
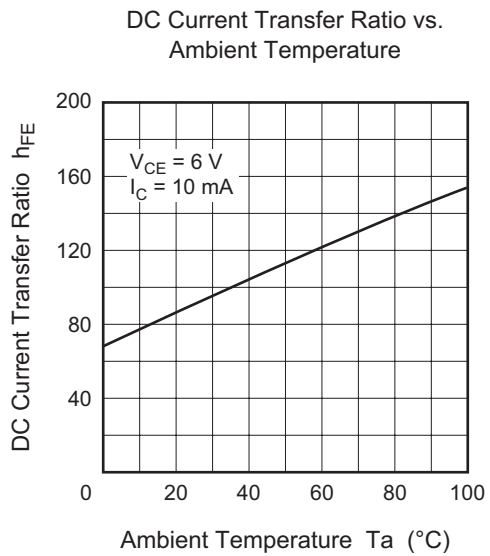
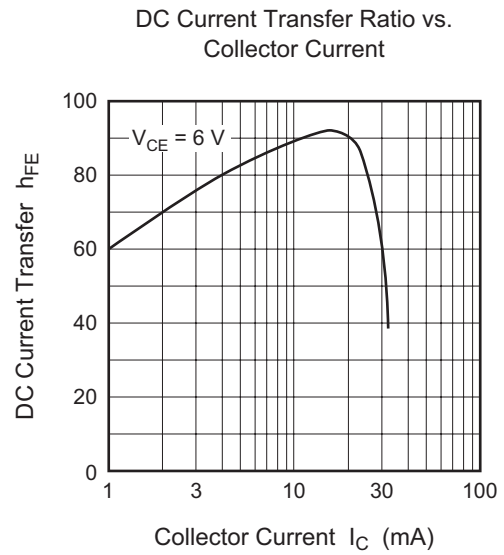
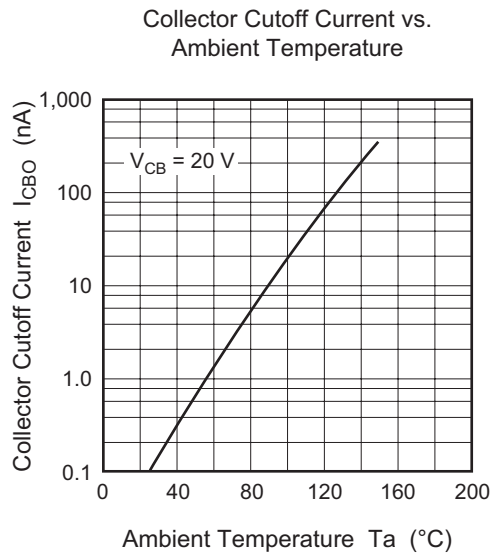
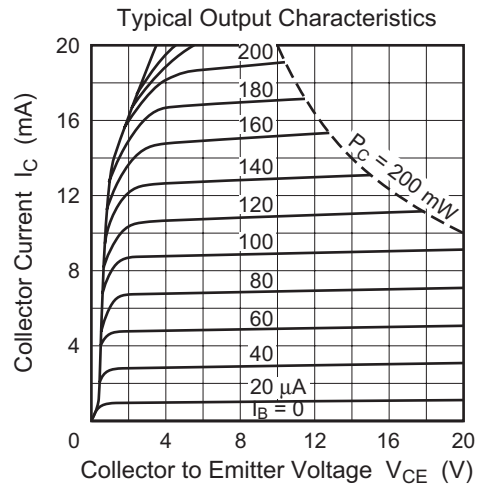
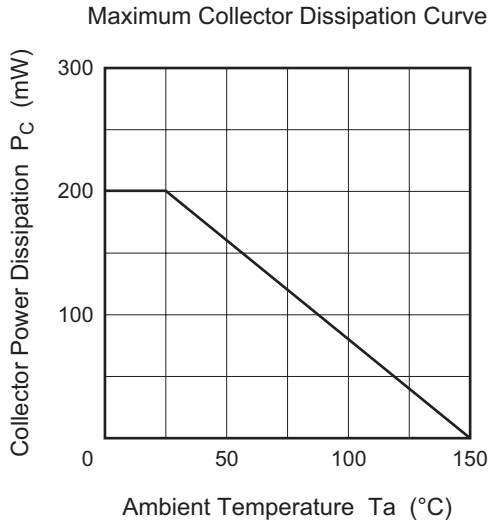
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CB0}$	200	V
Collector to emitter voltage	$V_{CES}$	200	V
	$V_{CEO}$	150	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	50	mA
Collector power dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

## Electrical Characteristics

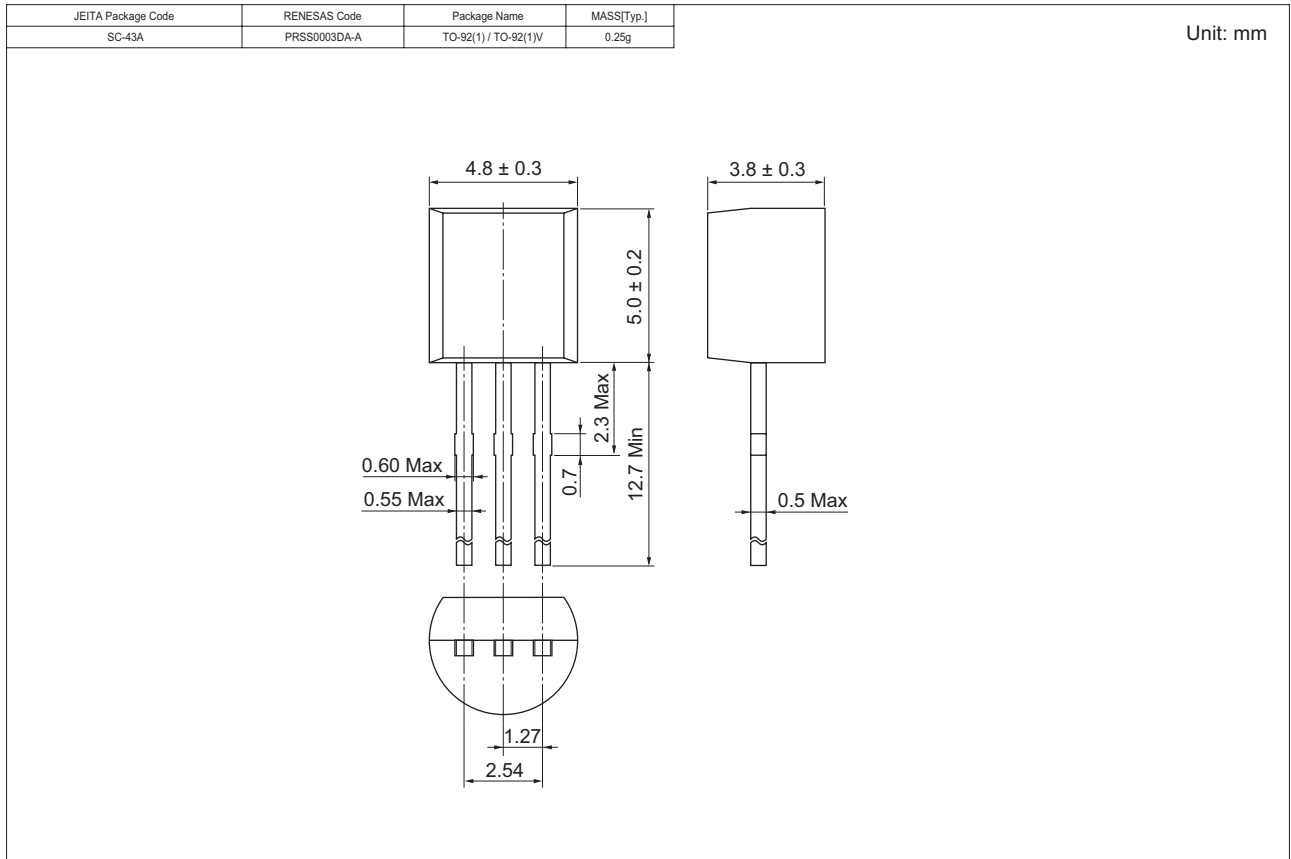
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CES}$	200	—	—	V	$I_C = 10 \mu A, R_{BE} = 0$
	$V_{(BR)CEO}$	150	—	—	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	$I_{CBO}$	—	—	0.1	$\mu A$	$V_{CB} = 20 \text{ V}, I_E = 0$
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	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$
Gain bandwidth product	$f_T$	60	—	—	MHz	$V_{CE} = 6 \text{ V}, I_C = 10 \text{ mA}$
Collector output capacitance	$C_{ob}$	—	—	10	pF	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

Main Characteristics



### Package Dimensions



### Ordering Information

Part Name	Quantity	Shipping Container
2SC1515KTZ	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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