

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: 2SC4304

Manufacturer: Sanken Electric USA Inc.

Package: TO-220-3 Full Pack

Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/sanken-electric-usa-inc/2sc4304.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

Contact Information

Email: info@antrexco.com

WhatsApp: +86-186-8066-5326

Website: <https://antrexco.com>

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

2SC4304

Silicon NPN Triple Diffused Planar Transistor (High Voltage High Speed Switching Transistor)

Application : Switching Regulator and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	900	V
V _{CE0}	800	V
V _{EB0}	7	V
I _C	3(Pulse6)	A
I _B	1.5	A
P _C	35(Tc=25°C)	W
T _j	150	°C
T _{stg}	-55 to +150	°C

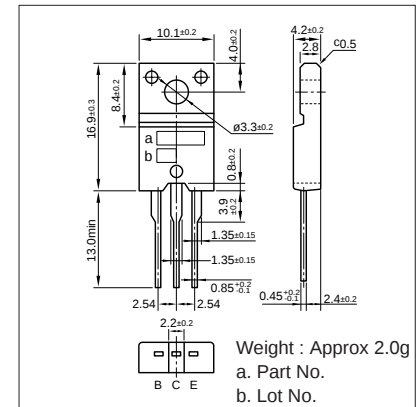
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings	Unit
I _{CB0}	V _{CB} =800V	100max	μA
I _{EB0}	V _{EB} =7V	100max	μA
V(BR) _{CEO}	I _C =10mA	800min	V
h _{FE}	V _{CE} =4V, I _C =0.7A	10 to 30	
V _{CE(sat)}	I _C =0.7A, I _B =0.14A	0.5max	V
V _{BE(sat)}	I _C =0.7A, I _B =0.14A	1.2max	V
f _r	V _{CE} =12V, I _E =-0.3A	15typ	MHz
COB	V _{CB} =10V, f=1MHz	50typ	pF

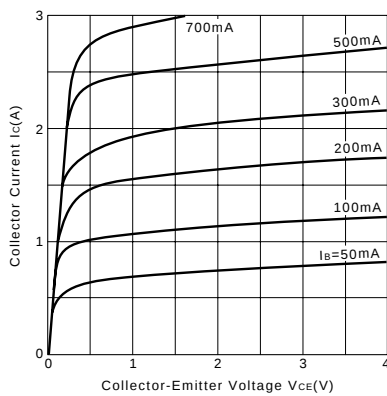
Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (A)	I _{B2} (A)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
250	357	0.7	10	-5	0.1	-0.35	0.7max	4.0max	0.7max

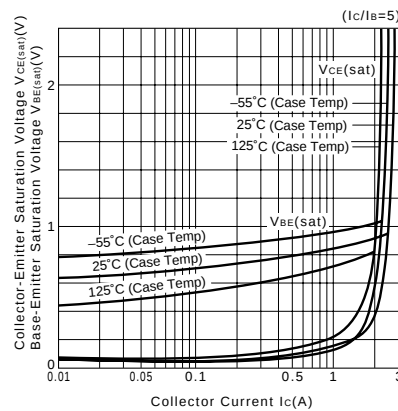
External Dimensions FM20(TO220F)



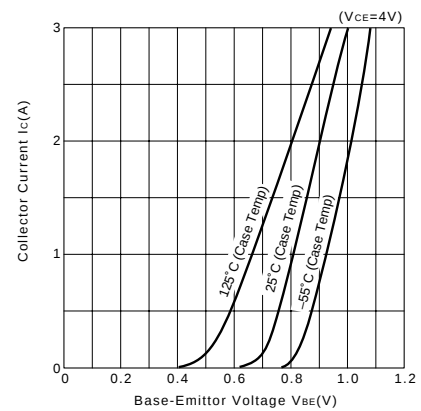
I_C-V_{CE} Characteristics (Typical)



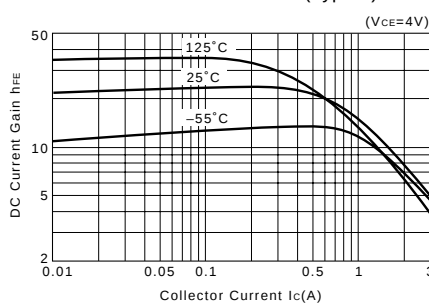
V_{CE(sat)}, V_{BE(sat)}-I_C Temperature Characteristics (Typical)



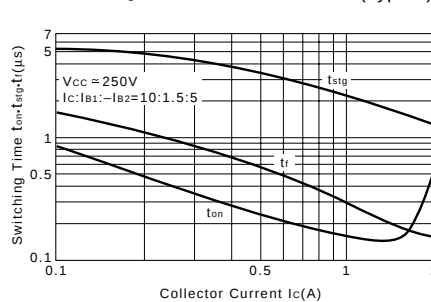
I_C-V_{BE} Temperature Characteristics (Typical)



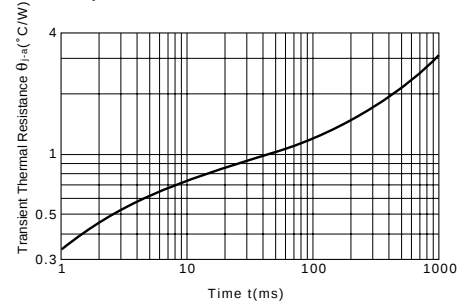
h_{FE}-I_C Characteristics (Typical)



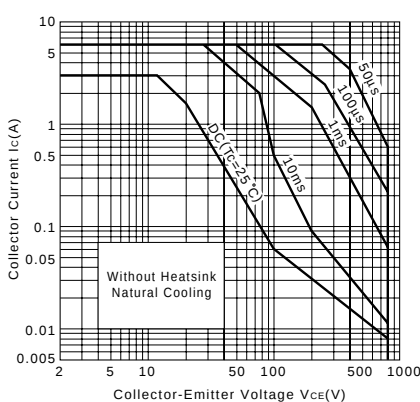
t_{on}, t_{stg}, t_r-I_C Characteristics (Typical)



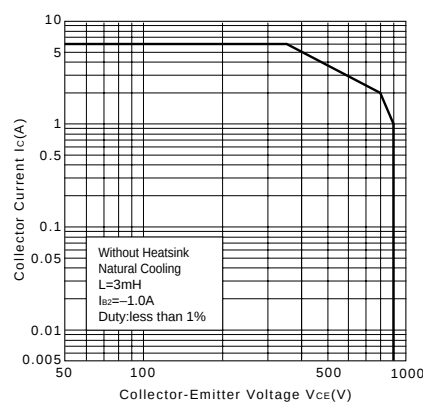
θ_{J-a}-t Characteristics



Safe Operating Area (Single Pulse)



Reverse Bias Safe Operating Area



P_C-T_a Derating

