

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

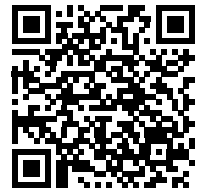
Part Number:	2SD2081
Manufacturer:	Sanken Electric USA Inc.
Package:	TO-220-3 Full Pack
Availability:	Please confirm with sales

Product Page:

<https://antrexco.com/product/details/sanken-electric-usa-inc/2sd2081.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

Contact Information

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

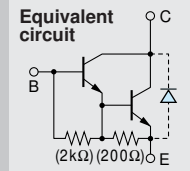
Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Darlington 2SD2081



Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SB1259)

Application : Driver for Solenoid, Motor and General Purpose

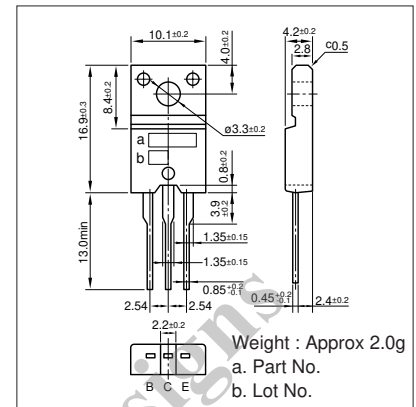
Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	120	V
V _{CEO}	120	V
V _{EB0}	6	V
I _C	10(Pulse15)	A
I _B	1	A
P _C	30(Tc=25°C)	W
T _j	150	°C
T _{stg}	-55 to +150	°C

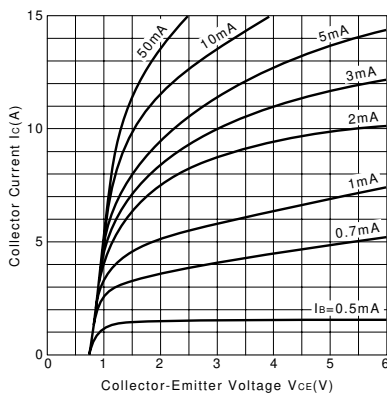
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings	Unit
I _{CBO}	V _{CB} =120V	10max	μA
I _{EBO}	V _{EB} =6V	10max	mA
V _{(BR)CEO}	I _C =10mA	120min	V
h _{FE}	V _{CE} =4V, I _C =5A	2000min	
V _{CE(sat)}	I _C =5A, I _B =5mA	1.5max	V
V _{BE(sat)}	I _C =5A, I _B =5mA	2.0max	V
f _T	V _{CE} =12V, I _E =-0.5A	60typ	MHz
C _{OB}	V _{CB} =10V, f=1MHz	95typ	pF

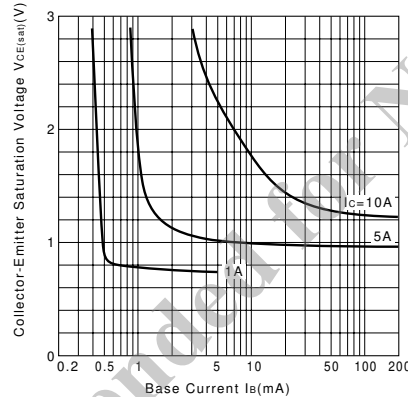
External Dimensions FM20(TO220F)



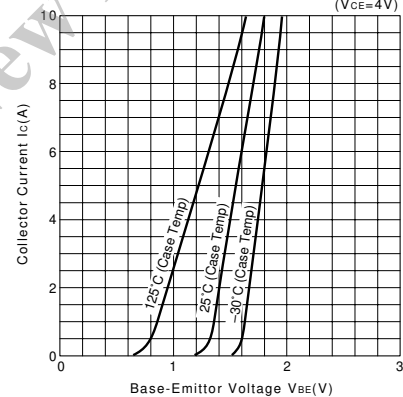
I_C-V_{CE} Characteristics (Typical)



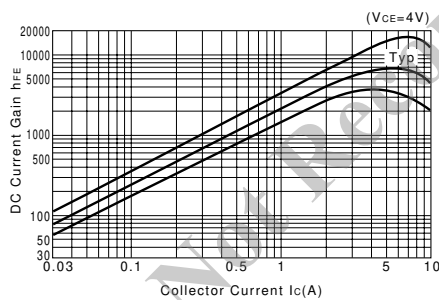
V_{CE(sat)}-I_B Characteristics (Typical)



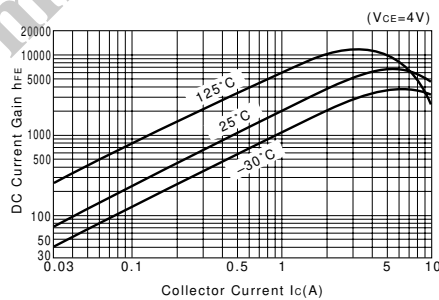
I_C-V_{BE} Temperature Characteristics (Typical)



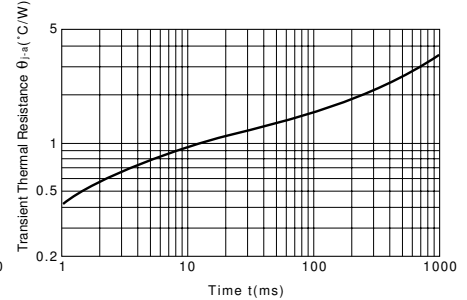
h_{FE}-I_C Characteristics (Typical)



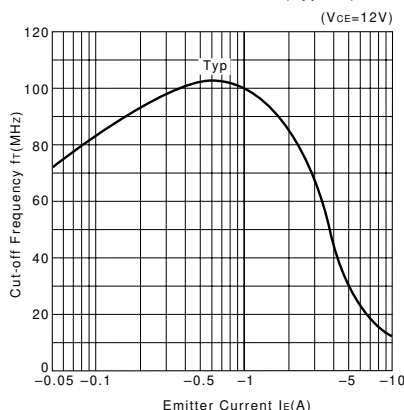
h_{FE}-I_C Temperature Characteristics (Typical)



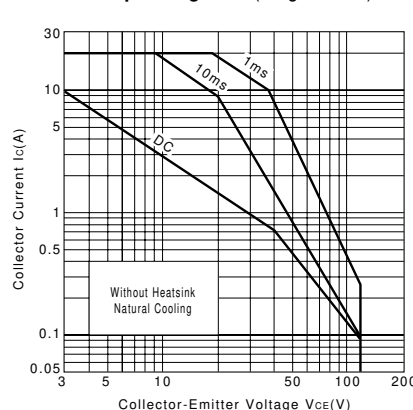
θ_{j-a}-t Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C-T_a Derating

