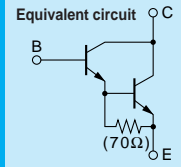


# Darlington 2SD2558



Silicon NPN Triple Diffused Planar Transistor

Application : Series Regulator and General Purpose

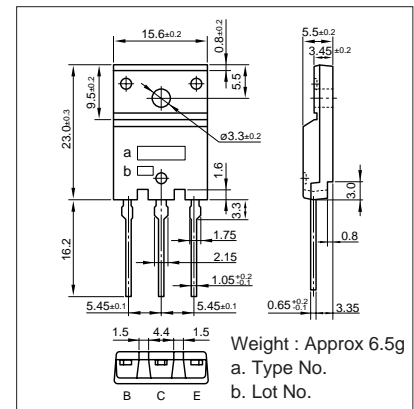
**Absolute maximum ratings** (Ta=25°C)

Symbol	2SD2558	Unit
V <sub>CB0</sub>	200	V
V <sub>CE0</sub>	200	V
V <sub>EB0</sub>	6	V
I <sub>C</sub>	5	A
I <sub>B</sub>	2	A
P <sub>C</sub>	60(T <sub>C</sub> =25°C)	W
T <sub>J</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

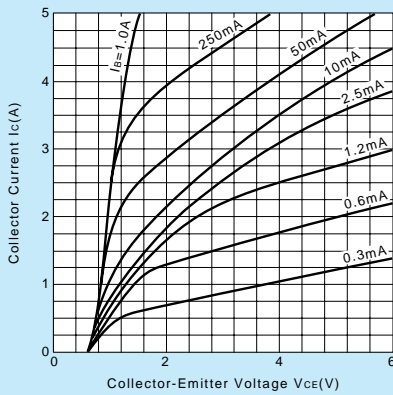
**Electrical Characteristics** (Ta=25°C)

Symbol	Conditions	2SD2558	Unit
I <sub>CB0</sub>	V <sub>CB</sub> =200V	100max	μA
I <sub>EB0</sub>	V <sub>EB</sub> =6V	5max	mA
V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA	200min	V
h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	1500 to 6500	
V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =5mA	1.5max	V
f <sub>r</sub>	V <sub>CE</sub> =10V, I <sub>E</sub> =-0.5A	15typ	MHZ
COB	V <sub>CB</sub> =10V, f=1MHz	110typ	pF

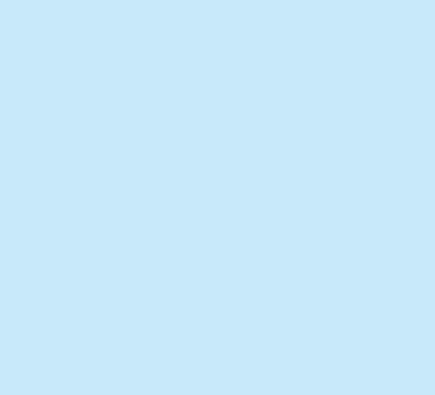
**External Dimensions FM100(TO3PF)**



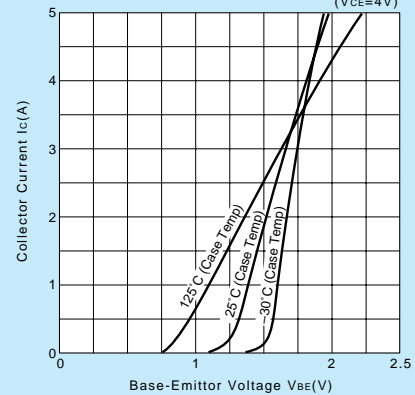
**I<sub>C</sub>-V<sub>CE</sub> Characteristics (Typical)**



**V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)**

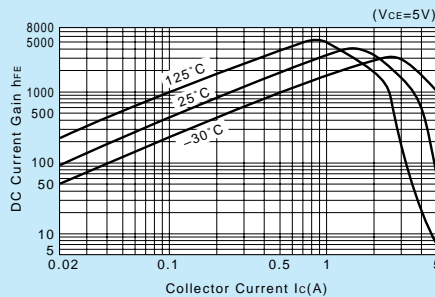


**I<sub>C</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)**

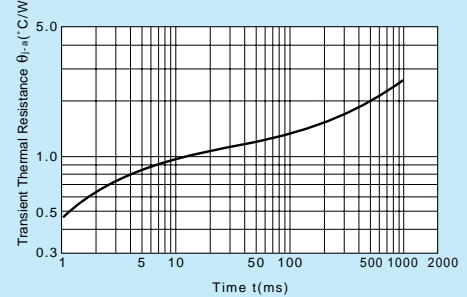


**h<sub>FE</sub>-I<sub>C</sub> Characteristics (Typical)**

**h<sub>FE</sub>-I<sub>C</sub> Temperature Characteristics (Typical)**

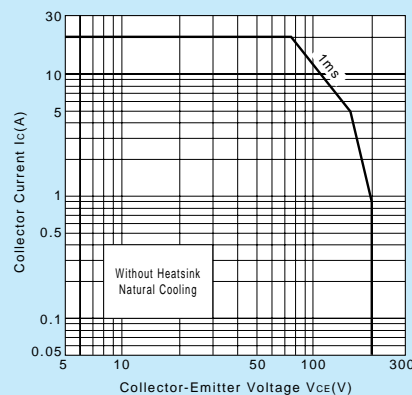


**θ<sub>j-a</sub>-t Characteristics**



**f<sub>T</sub>-I<sub>E</sub> Characteristics (Typical)**

**Safe Operating Area (Single Pulse)**



**P<sub>C</sub>-T<sub>a</sub> Derating**

