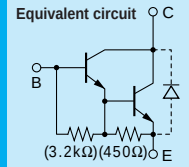


Darlington

2SD2557



Silicon NPN Triple Diffused Planar Transistor

Application : Series Regulator and General Purpose

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

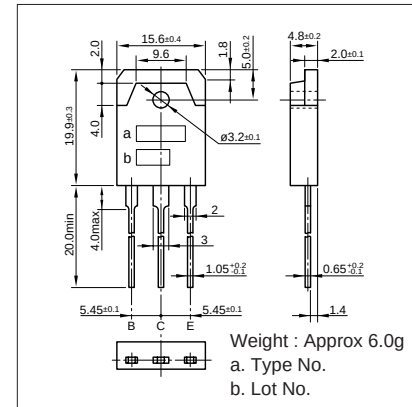
Symbol	2SD2557	Unit
V_{CB0}	200	V
V_{CE0}	200	V
V_{EB0}	6	V
I_C	5	A
I_B	2	A
P_C	70($T_c=25^\circ\text{C}$)	W
T_j	150	$^\circ\text{C}$
T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics

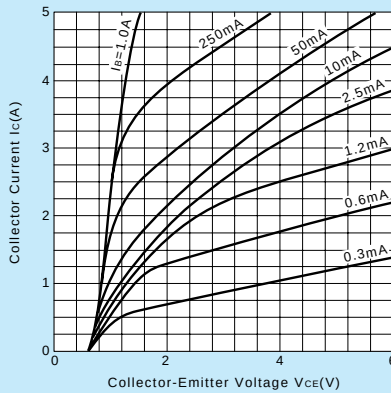
($T_a=25^\circ\text{C}$)

Symbol	Conditions	2SD2557	Unit
I_{CBO}	$V_{CB}=200\text{V}$	100max	μA
I_{EBO}	$V_{EB}=6\text{V}$	5max	mA
$V_{(BR)CEO}$	$I_C=10\text{mA}$	200min	V
h_{FE}	$V_{CE}=5\text{V}$, $I_C=1\text{A}$	1500 to 6500	
$V_{CE(sat)}$	$I_C=1\text{A}$, $I_B=5\text{mA}$	1.5max	V
f_r	$V_{CE}=10\text{V}$, $I_E=-0.5\text{A}$	15typ	MHz
COB	$V_{CB}=10\text{V}$, $f=1\text{MHz}$	110typ	pF

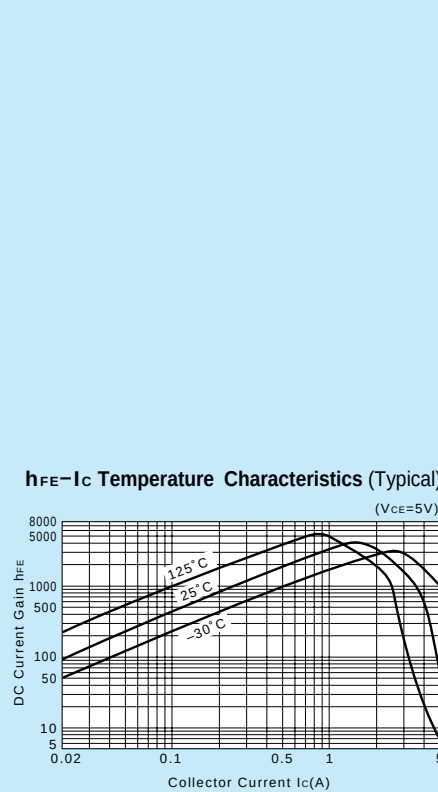
External Dimensions MT-100(TO3P)



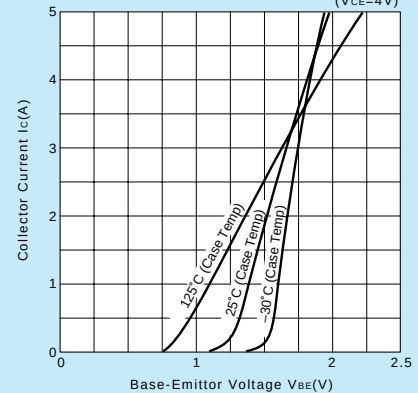
I_C-V_{CE} Characteristics (Typical)



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

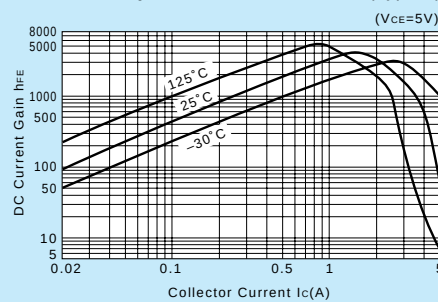


I_C-V_{BE} Temperature Characteristics (Typical)

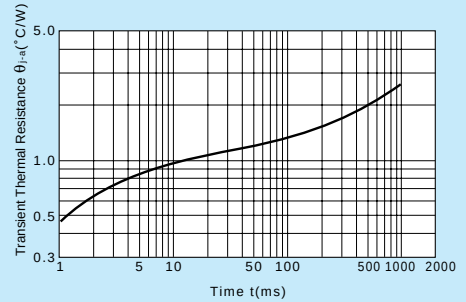


$h_{FE}-I_C$ Characteristics (Typical)

$h_{FE}-I_C$ Temperature Characteristics (Typical)

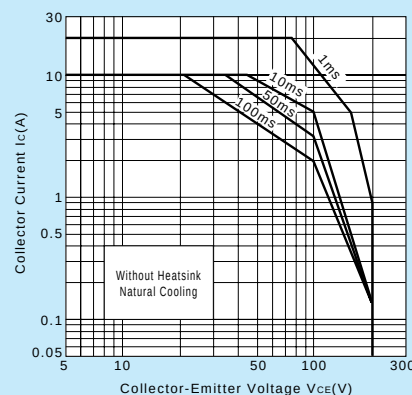


$\theta_{j-a}-t$ Characteristics



f_T-I_E Characteristics (Typical)

Safe Operating Area (Single Pulse)



P_C-T_a Derating

