

2SD2141

Silicon NPN Triple Diffused Planar Transistor

Application : Ignitor, Driver for Solenoid and Motor, and General Purpose

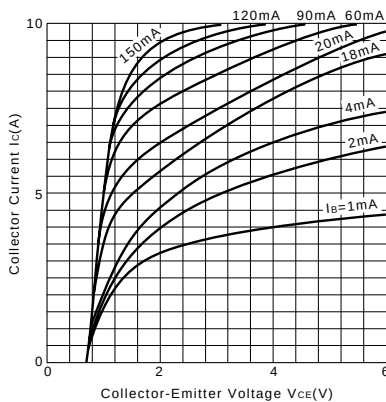
Absolute maximum ratings

Symbol	Ratings	Unit
V_{CB0}	380±50	V
V_{CE0}	380±50	V
V_{EB0}	6	V
I_C	6(Pulse10)	A
I_B	1	A
P_C	35($T_c=25^\circ\text{C}$)	W
T_j	150	$^\circ\text{C}$
T_{stg}	-55 to +150	$^\circ\text{C}$

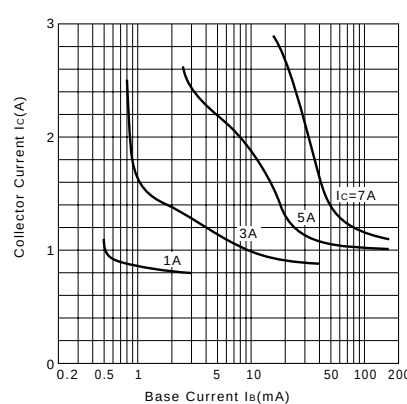
Electrical Characteristics

Conditions	Ratings	Unit
$V_{CB}=330\text{V}$	10max	μA
$V_{EB}=6\text{V}$	20max	mA
$I_C=25\text{mA}$	330 to 430	V
$V_{CE}=2\text{V}, I_C=3\text{A}$	1500min	
$I_C=4\text{A}, I_B=20\text{mA}$	1.5max	V
$V_{CE}=12\text{V}, I$	20typ	MHz
	95typ	pF

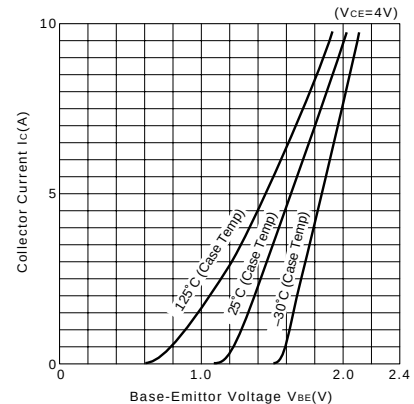
I_C-V_{CE} Characteristics (Typical)



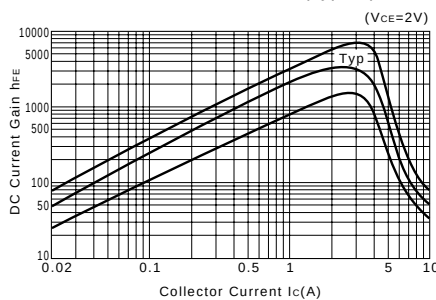
$V_{CE(sat)}-I_B$ Characteristics (Typical)



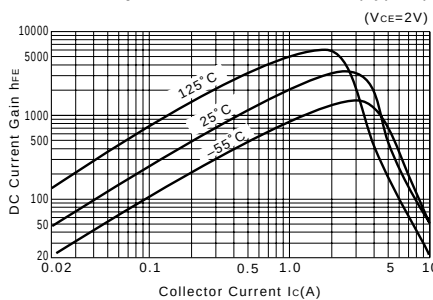
I_C-V_{BE} Temperature Characteristics (Typical)



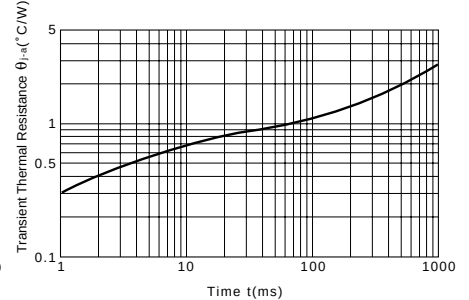
$h_{FE}-I_C$ Characteristics (Typical)



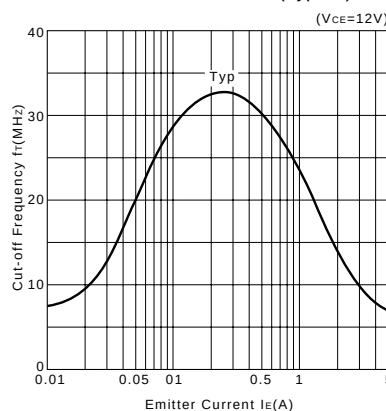
$h_{FE}-I_C$ Temperature Characteristics (Typical)



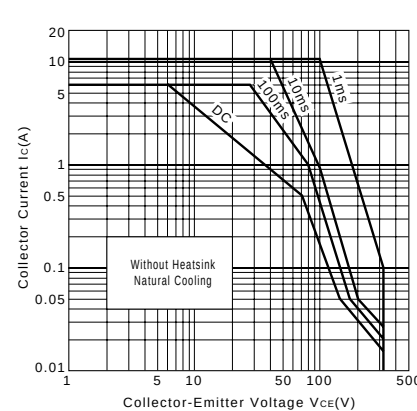
$\theta_{JA}-t$ Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C-T_a Derating

