

2SC3577

Silicon PNP Triple-Diffused Planar Type

High Breakdown Voltage, High Speed Switching

Features

- High speed switching
- High collector-base voltage (V_{CB0})
- Good linearity of DC current gain (h_{FE})
- "Full Pack" package for simplified mounting on a heat sink with one screw

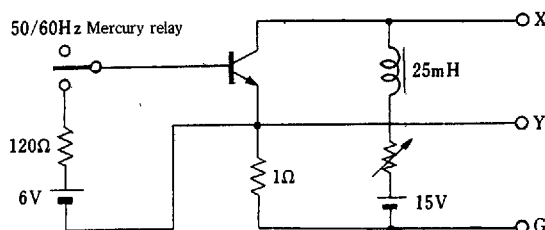
Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-base voltage	V_{CB0}	850	V
Collector-emitter voltage	V_{CES}	850	V
	V_{CEO}	650	V
Emitter-base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	10	A
Collector current	I_C	5	A
Base current	I_B	3	A
Collector power dissipation	$T_c=25^\circ\text{C}$	80	W
	$T_a=25^\circ\text{C}$	3	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{sig}	$-55 \sim +150$	$^\circ\text{C}$

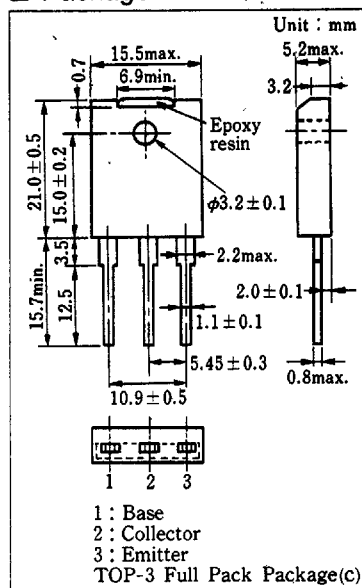
Electrical Characteristics ($T_c=25^\circ\text{C}$)

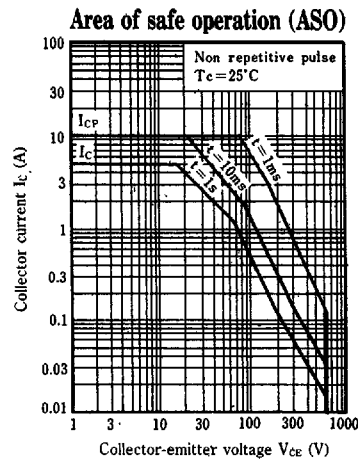
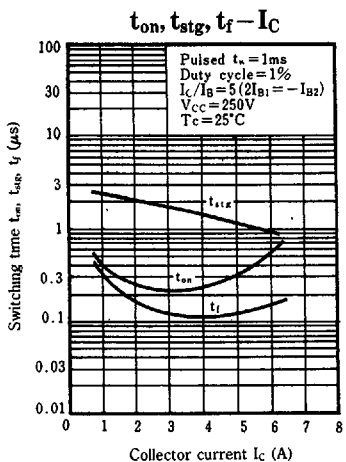
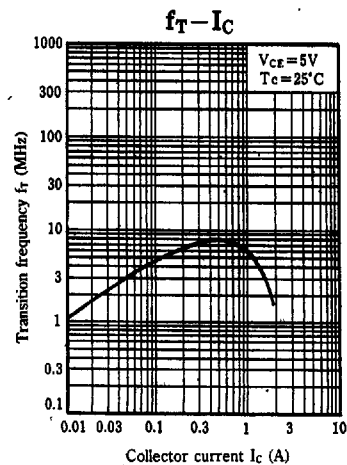
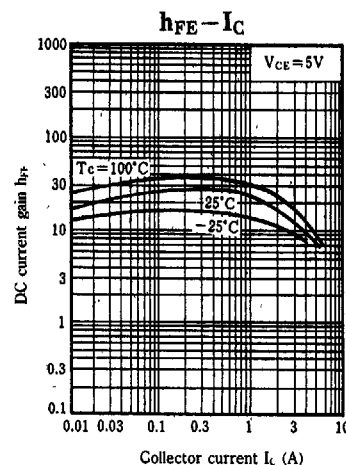
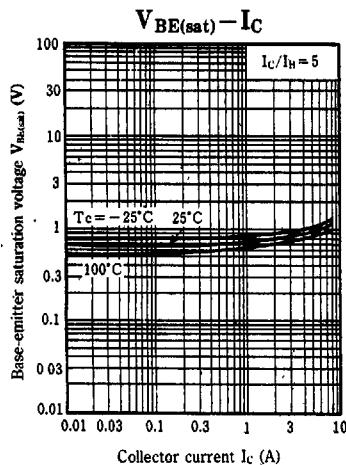
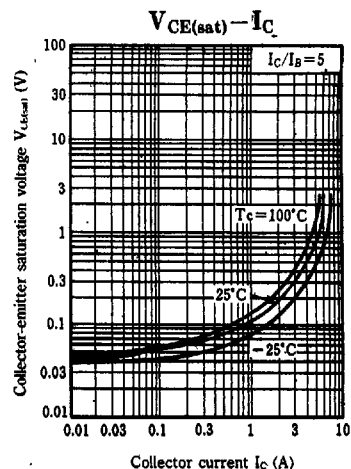
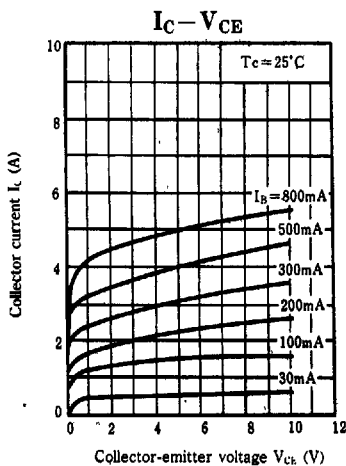
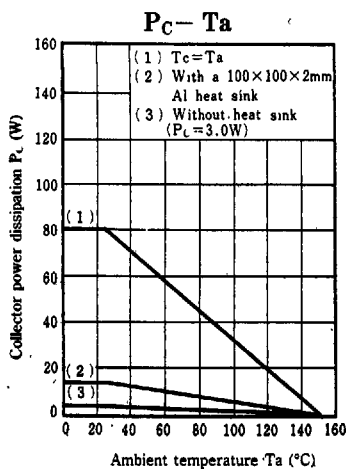
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CES}	$V_{CB}=800\text{ V}, V_{BE}=0$			50	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=7\text{ V}, I_C=0$			50	μA
Collector-emitter voltage	$V_{CEO(sus)}^*$	$I_C=0.5\text{ A}, L=50\text{ mH}$	650			V
DC current gain	h_{FE1}	$V_{CE}=5\text{ V}, I_C=0.01\text{ A}$	10			
	h_{FE2}	$V_{CE}=5\text{ V}, I_C=3\text{ A}$	6			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\text{ A}, I_B=0.6\text{ A}$			1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=3\text{ A}, I_B=0.6\text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE}=5\text{ V}, I_C=0.5\text{ A}, f=1\text{ MHz}$		6		MHz
Turn-on time	t_{on}	$I_C=3\text{ A}$			1.0	μs
Storage time	t_{sig}	$I_{B1}=0.6\text{ A}, I_{B2}=-1.2\text{ A}$			2.5	μs
Collector current fall time	t_f	$V_{CC}=250\text{ V}$			0.5	μs

* $V_{CEO(sus)}$ Test method



Package Dimensions





Note) Refer to P.435 (on 2SC3507) for $R_{th(t)} - t$ characteristics.

6932852 0016452 2TT