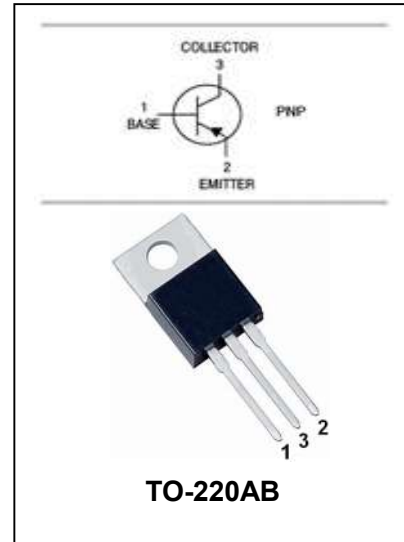


## Silicon PNP Triple Diffused Type

**2SB1375**

### FEATURES

- Low Saturation Voltage:  $V_{CE(sat)} = -1.5V(\text{max.})$   
( $I_C/I_B = -2A/-0.2A$ )
- High Power Dissipation:  $P_C = 25W(T_C = 25^\circ C)$
- Complements the 2SD2012.



### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-7	V
$I_C$	Collector Current	-3	A
$I_B$	Base Current	-0.5	A
$P_C$	Collector Dissipation $T_a = 25^\circ C$ $T_c = 25^\circ C$	2.0 25	W
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ C$

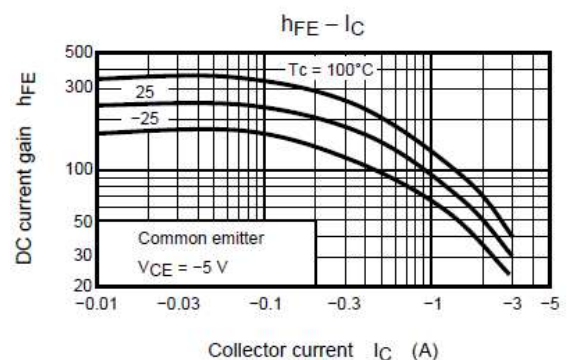
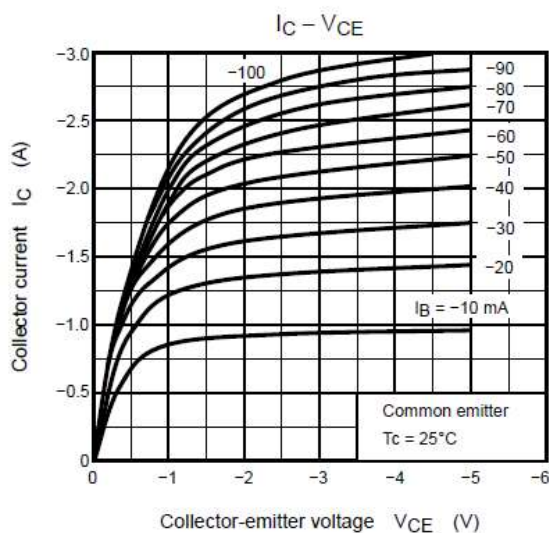
## Silicon PNP Triple Diffused Type

## 2SB1375

**ELECTRICAL CHARACTERISTICS** Ratings at 25°C ambient temperature unless otherwise specified.

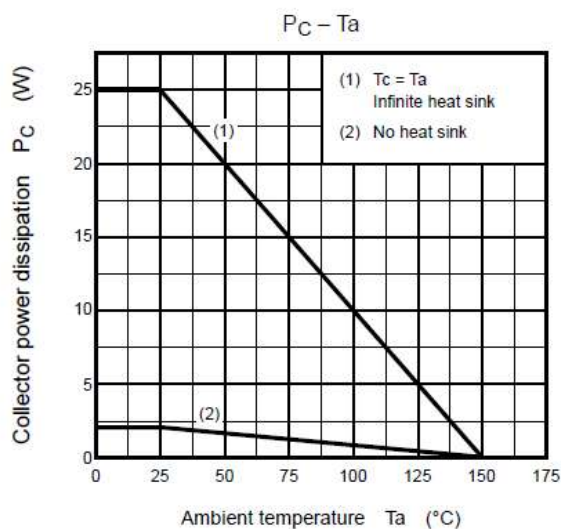
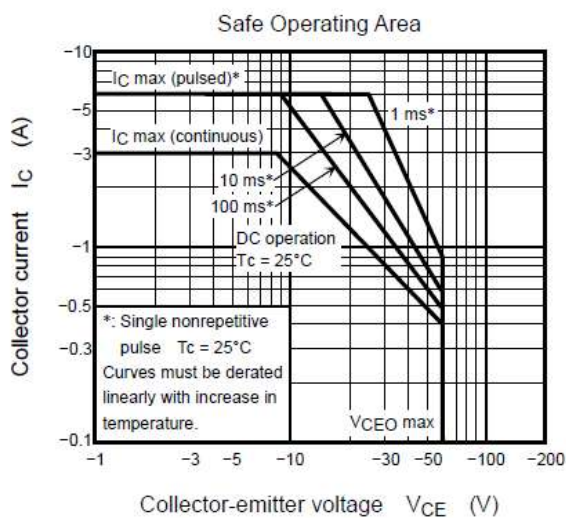
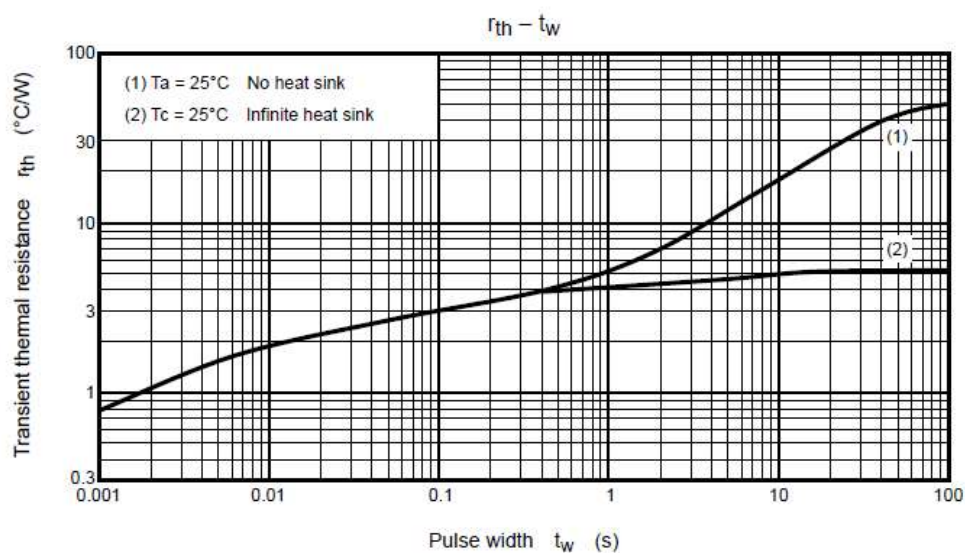
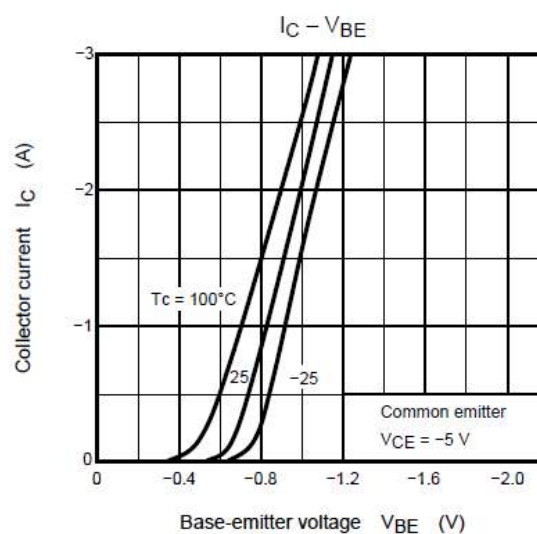
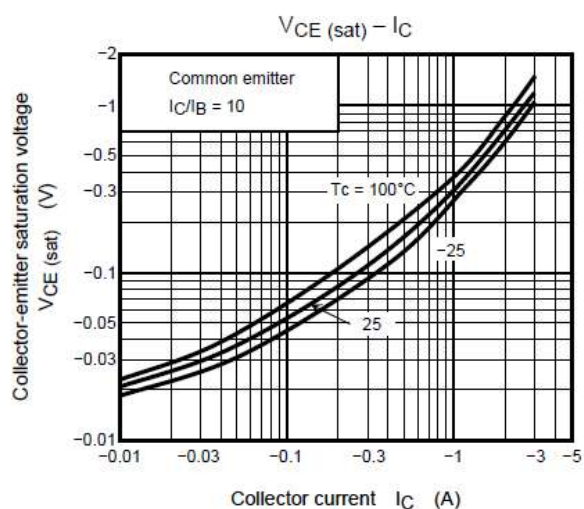
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-60			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -60V, I_E = 0$			-10	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -7V, I_C = 0$			-10	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = -5V, I_C = -0.5A$ $V_{CE} = -5V, I_C = -2A$	100 15		320	
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.2A$		-1.0	-1.5	V
Base-emitter Voltage	$V_{BE}$	$I_C = -0.5A, V_{CE} = -5V$		-0.75	-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -5V, I_E = -0.5A$		9		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1$ MHz		50		pF

**TYPICAL CHARACTERISTICS** @  $T_a = 25^\circ C$  unless otherwise specified



# Silicon PNP Triple Diffused Type

## 2SB1375



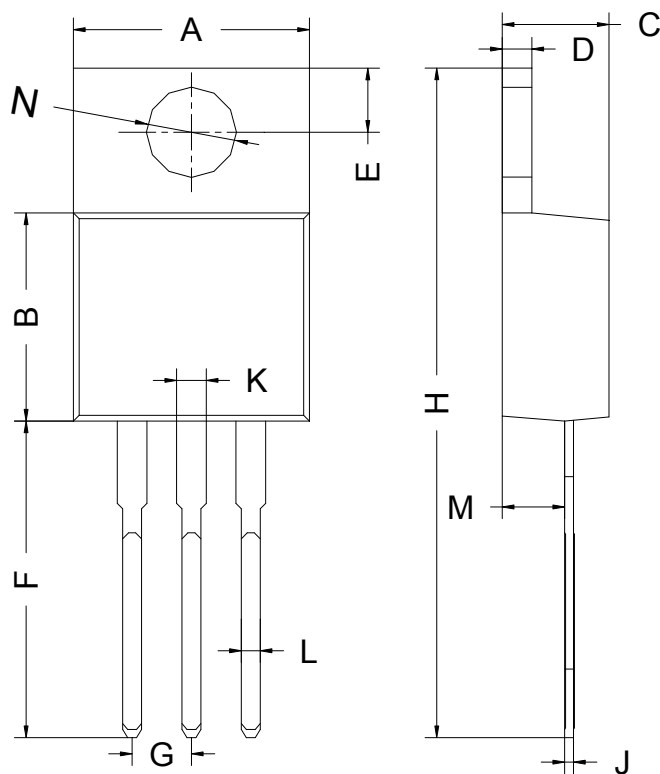
## Silicon PNP Triple Diffused Type

**2SB1375**

### PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB



TO-220AB		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.47	4.67
D	1.17	1.37
E	2.64	2.84
F	13.14	13.74
G	2.44	2.64
H	28.03	28.83
J	0.28	0.48
K	1.22	1.32
L	0.71	0.91
M	2.40	2.60
N	3.76	3.96
All Dimensions in mm		