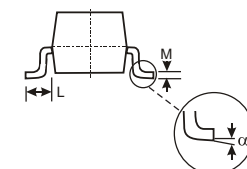
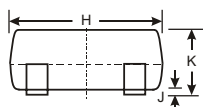
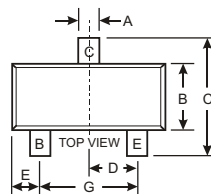


### Features

- for switching and amplifier applications.
- NPN complement:S8050
- Pb-Free Package is available.
- Marking Code:2TY

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	-40	V
Collector Emitter Voltage	$V_{CEO}$	-25	V
Emitter Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-500	mA
Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	$^\circ\text{C}$



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
$\alpha$	$0^\circ$	$8^\circ$
All Dimensions in mm		

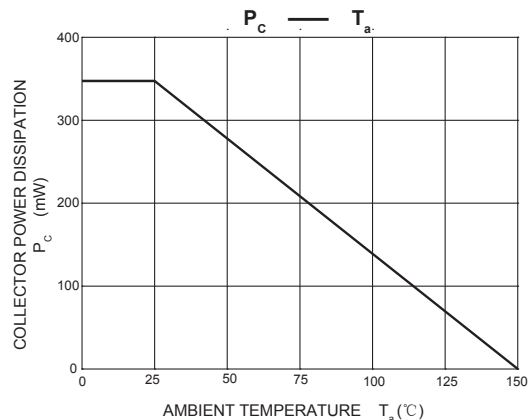
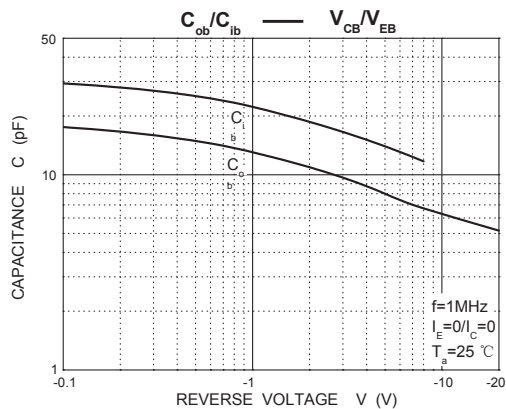
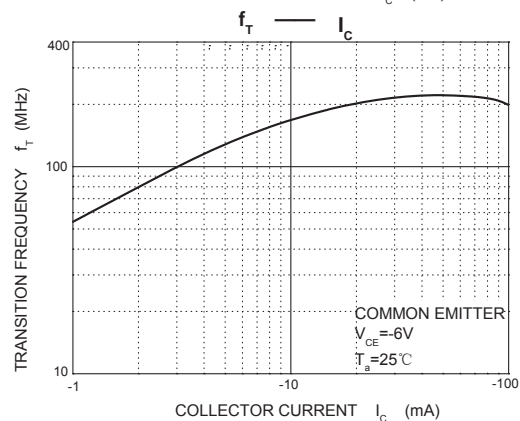
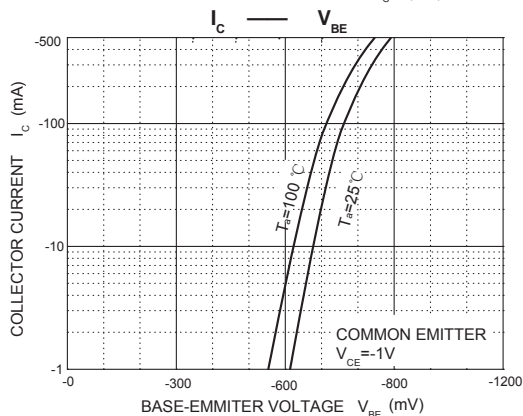
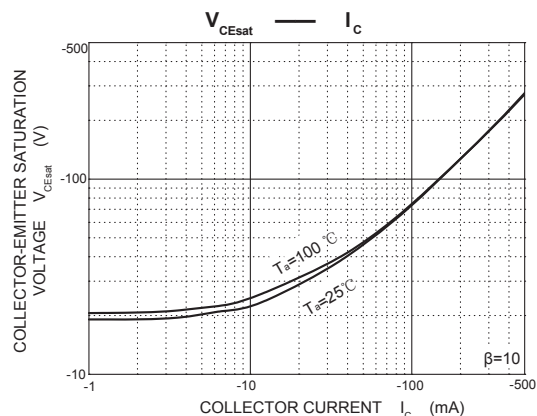
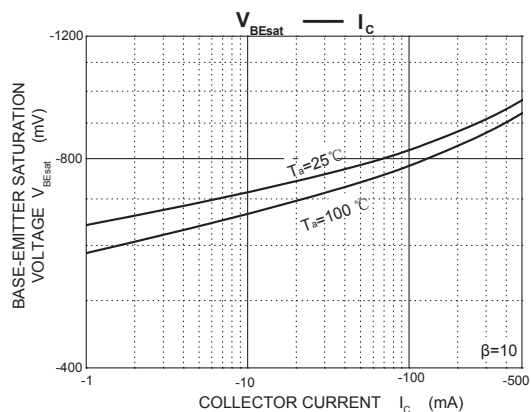
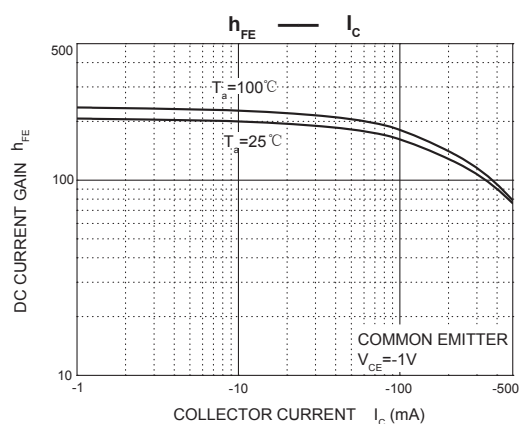
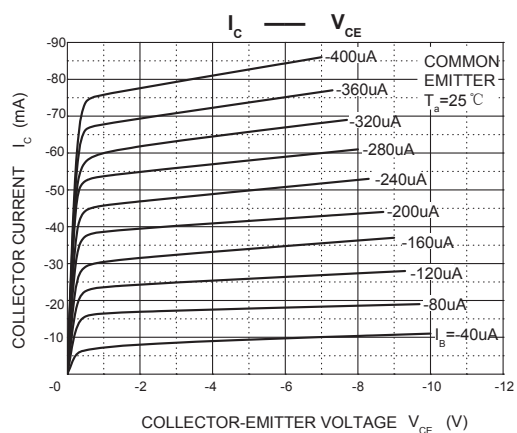
### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$ at $-V_{CE} = 1\text{ V}$ , $I_C = -500\text{ mA}$	$h_{FE}$	120	-	400	-
	$h_{FE}$	40	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$	$-V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$	$-V_{BE(sat)}$	-	-	1.2	V
Gain Bandwidth Product at $V_{CE} = 5\text{ V}$ , $I_C = -10\text{ mA}$	$f_T$	-	100	-	MHz

### CLASSIFICATION OF $h_{FE}$

Rank	L	H	J
Range	120-200	200-350	300-400

### TYPICAL TRANSIENT CHARACTERISTICS



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## IMPORTANT NOTICE

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