



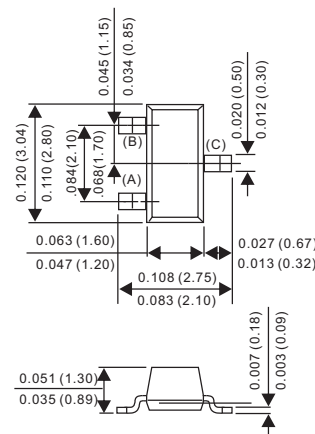
**Features**

- Collector current:  $I_C=0.5A$



**MAXIMUM RATINGS ( $T_a=25^\circ C$  unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector–Base Voltage	$V_{CBO}$	-40	V
Collector–Emitter Voltage	$V_{CEO}$	-25	V
Emitter–Base Voltage	$V_{EBO}$	-5	V
Collector Current — Continuous	$I_C$	-0.5	A
Collector Dissipation	$P_C$	0.3	W
Operation Junction and Storage Temperature Range	$T_J, T_{stg}$	-55~+150	$^\circ C$



**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$  unless otherwise specified)**

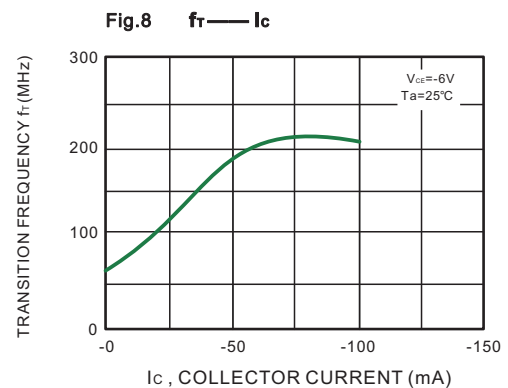
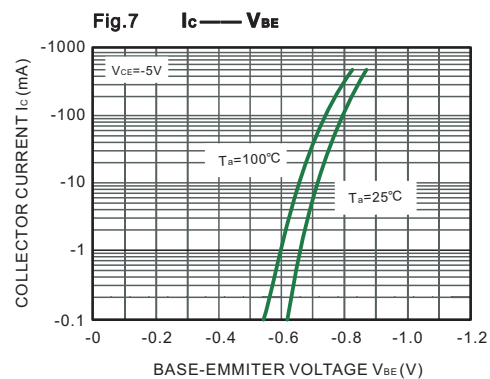
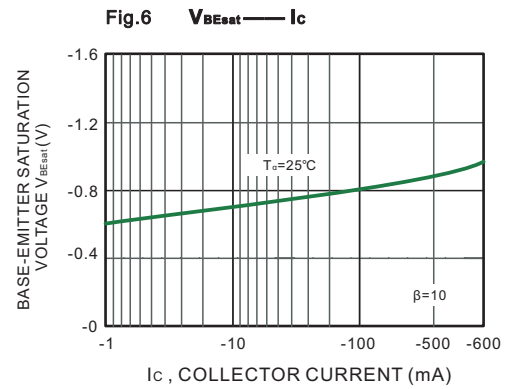
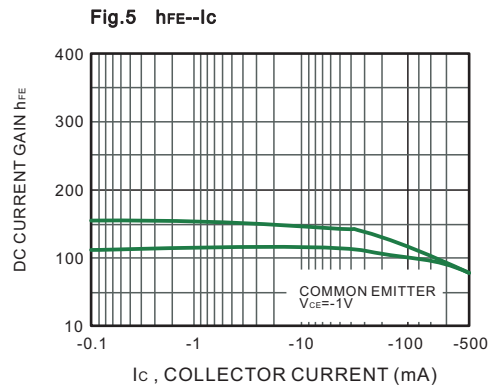
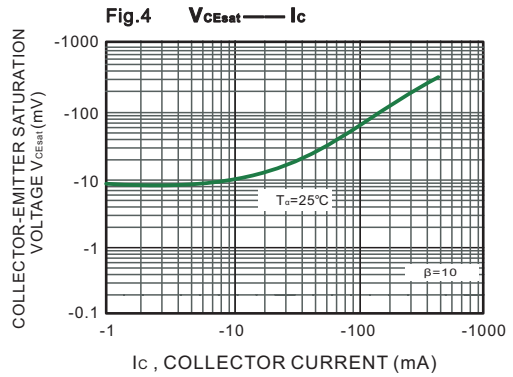
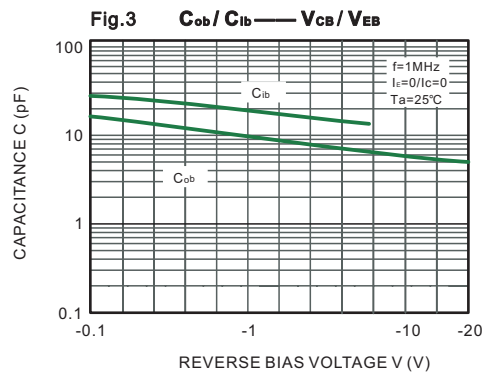
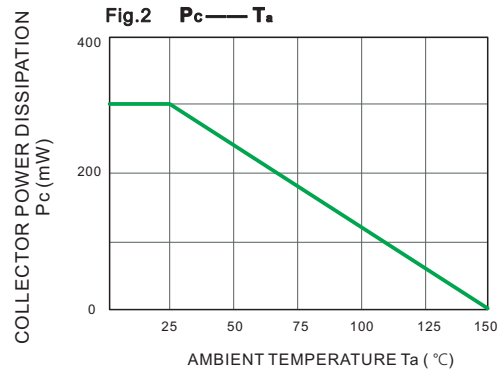
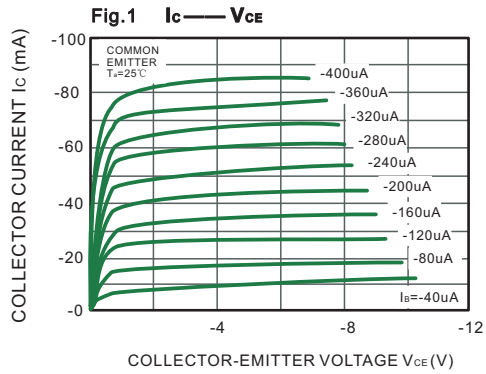
Dimensions in inches and (millimeters)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{ mA}, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40V, I_E = 0$		-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -20V, I_B = 0$		-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -3V, I_C = 0$		-0.1	$\mu A$
DC current gain	$h_{FE1}$	$V_{CE} = -1V, I_C = -50mA$	120	400	
	$h_{FE2}$	$V_{CE} = -1V, I_C = -500mA$	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-1.2	V
Transition frequency	$f_T$	$V_{CE} = -6V, I_C = -20mA, f = 30MHz$	150		MHz

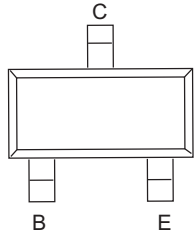
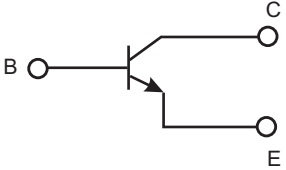
**CLASSIFICATION OF  $h_{FE}$  (2)**

RANK	L	H	J
RANGE	120-200	200-350	300-400

**Rating and characteristic curves**



### Pinning information

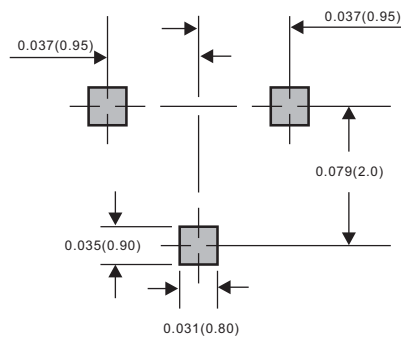
Pin	Simplified outline	Symbol
PinB Base PinC Collector PinE Emitter		

### Marking

Type number	Marking code
MMBTS8550	2TY

### Suggested solder pad layout

#### SOT-23



Dimensions in inches and (millimeters)