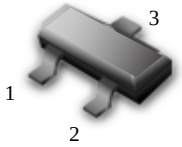
General Purpose Transistors

NPN Silicon

FEATURE

- High current capacity in compact package.
  I_C =1.5A.
- Epitaxial planar type.
- Pb-Free Package is available.



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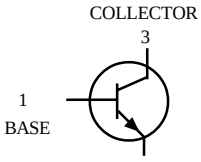


DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
FTC8050HH	KEY	3000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Max	Unit
Collector-Emitter Voltage	V_{CEO}	50	V
Collector-Base Voltage	V_{CBO}	50	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current-continuoun	I_C	1500	mAdc

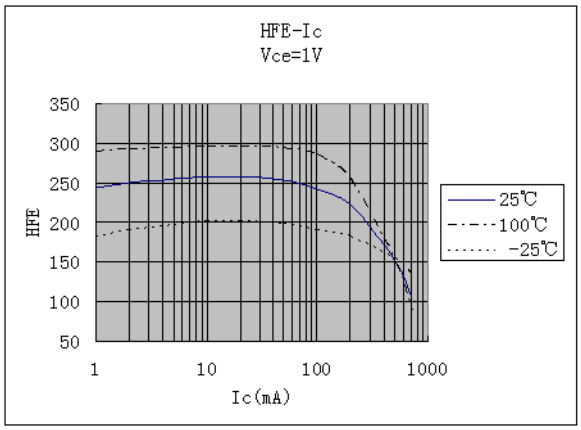
THERMAL CHARACTERISTICS

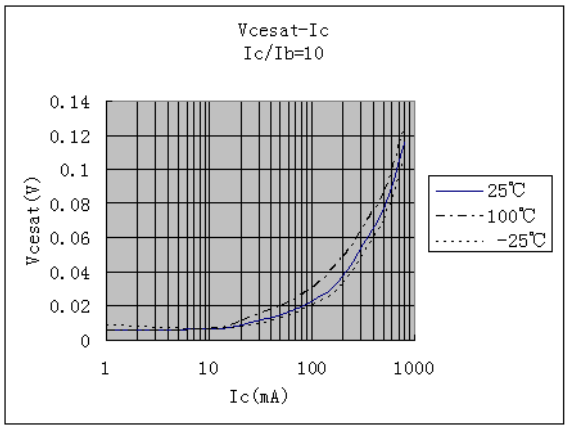
Characteristic	Symbol	Max	Unit
Total Dissipation Power	P_D	225	mW
Junction and Storage Temperature	T_j, T_{stg}	-55 to +150	℃

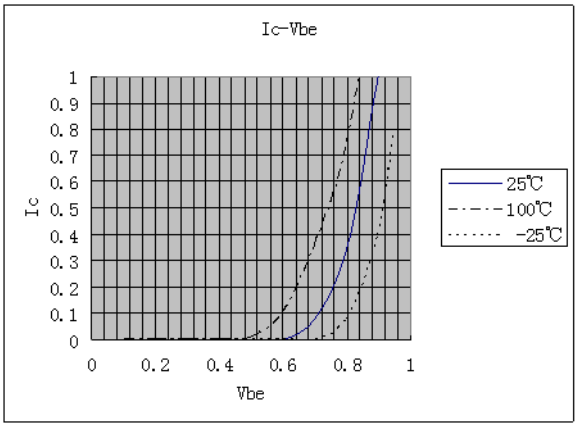
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

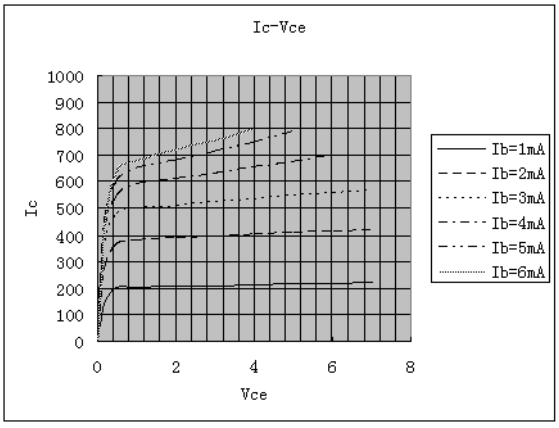
Characteristic	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage (I_C=2.0mA,I_B=0)	$V_{(BR)CEO}$	50	–	–	V
Emitter-Base Breakdown Voltage (I_E=100μA ,I_C =0)	$V_{(BR)EBO}$	6	–	–	V
Collector-Base Breakdown Voltage (I_C=100μA ,I_E =0)	$V_{(BR)CBO}$	50	–	–	V
Collector Cutoff Current (V_{CB}=35V,I_E=0)	I_{CBO}	–	–	100	nA
Emitter Cutoff Current (V_{EB}=6V,I_C=0)	I_{EBO}	–	–	100	nA
Base-Emitter Voltage (V_{CE}=1V,I_C=10mA)	V_{BE}	–	0.66	1	V
DC Current Gain I_C=100mA,V_{CE}=1V	h_{FE}	160	-	320	
DC Current Gain I_C=800mA,V_{CE}=1V	h_{FE}	40	-	-	
Collector-Emitter Saturation Voltage (I_C=800mA I_B=80mA)	$V_{CE(S)}$	-	-	0.5	V

Electrical Characteristic Curves (T_A=25°C unless otherwise noted)









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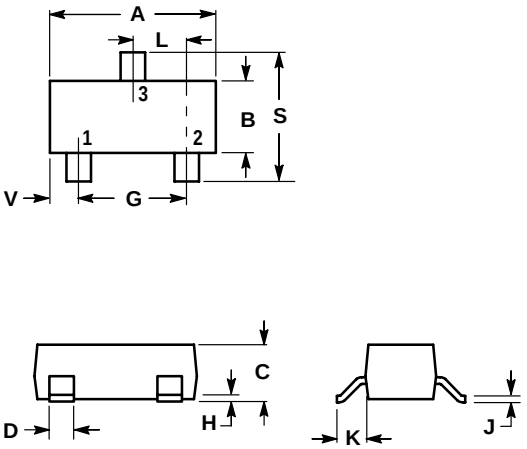

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

PIN 1. BASE
2. EMITTER
3. COLLECTOR