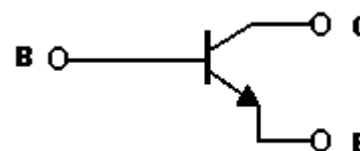
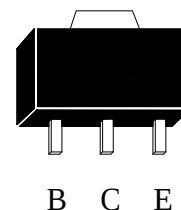


General Purpose NPN Epitaxial Planar Transistor

Features:

- High breakdown voltage, $BV_{CEO} \geq 120V$
- Large continuous collector current capability
- Low collector saturation voltage
- Pb-free package

SOT-89



B : Base
 C : Collector
 E : Emitter

Ordering Information

Device	Package	Shipping
KTC2880M3	SOT-89 (Pb-free lead plating and halogen-free package)	1000 pcs / Tape & Reel

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	180	V
Collector-Emitter Voltage	V _{CEO}	120	V
Emitter-Base Voltage	V _{EBO}	7	V
Collector Current	I _C	1	A
Base Current	I _B	0.2	A
Power Dissipation	Pd	0.6	W
		1 (Note 1)	W
		2 (Note 2)	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Note : 1. When mounted on FR-4 PCB with area measuring 10×10×1 mm

2 . When mounted on ceramic with area measuring 40×40×1 mm

Characteristics (Ta=25°C)

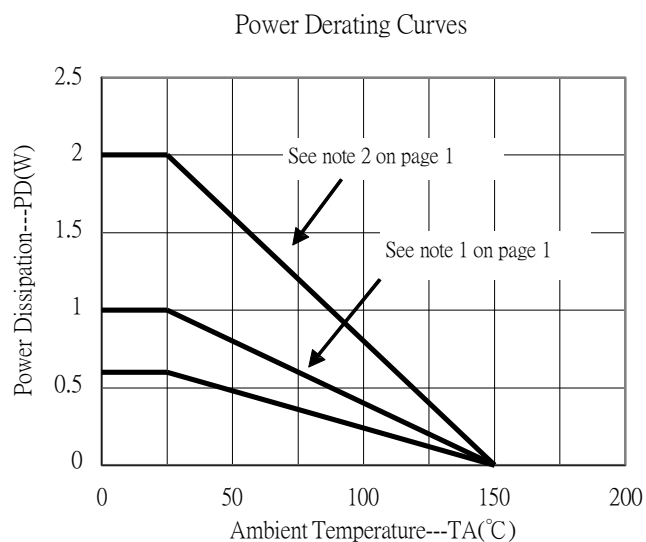
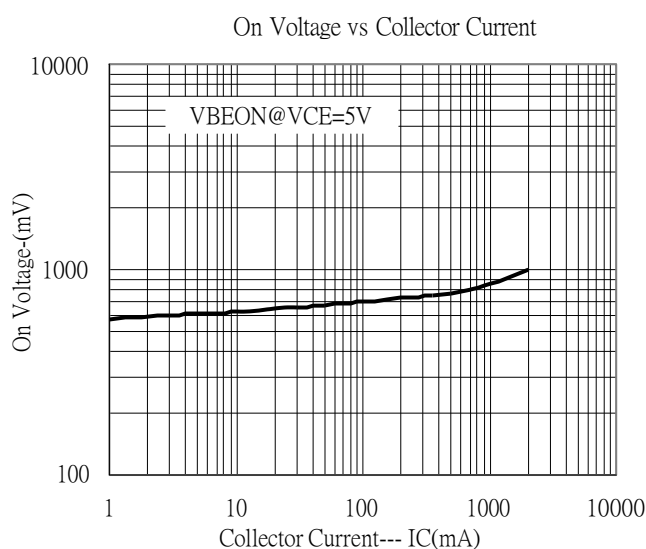
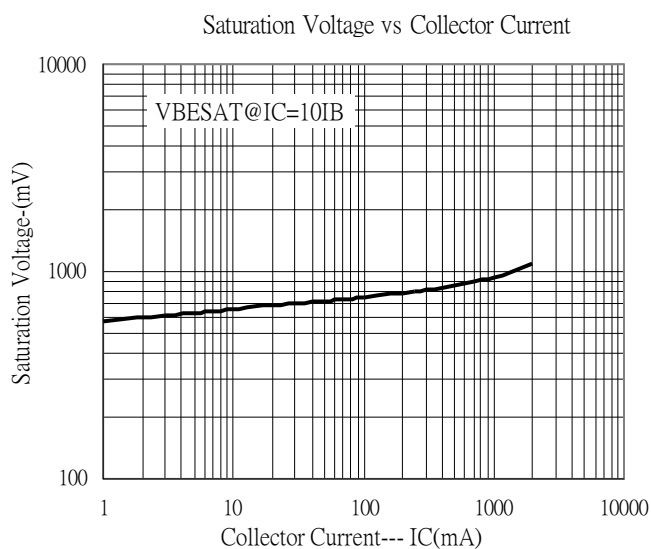
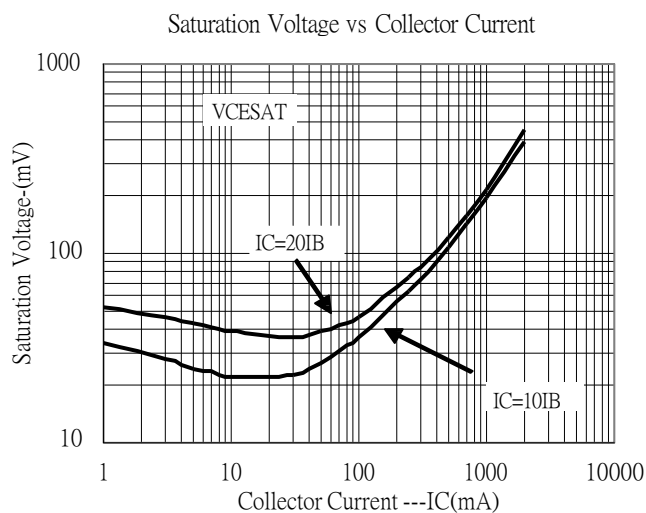
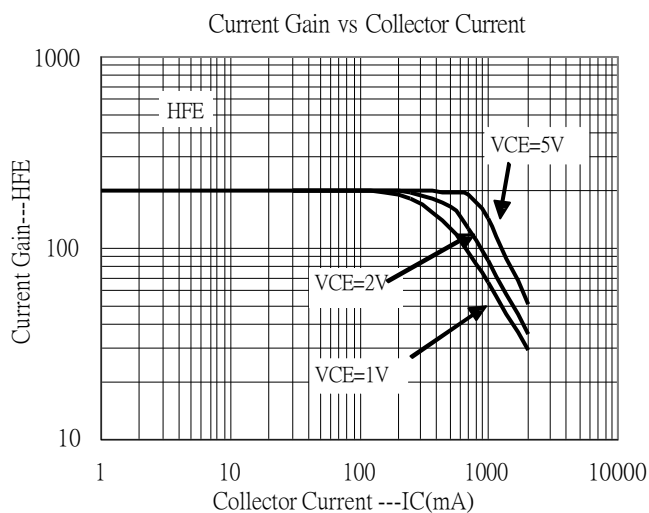
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	180	-	-	V	I _C =50μA
BV _{CEO}	120	-	-	V	I _C =1mA
BV _{EBO}	7	-	-	V	I _E =50μA
I _{CBO}	-	-	100	nA	V _{CB} =180V
I _{EBO}	-	-	100	nA	V _{EB} =6V
*V _{CE(sat)}	-	0.1	0.2	V	I _C =500mA, I _B =50mA
*V _{CE(sat)}	-	0.2	0.5	V	I _C =1A, I _B =50mA
*V _{BE(sat)}	-	-	1	V	I _C =500mA, I _B =50mA
*V _{BE(on)}	-	-	0.9	V	V _{CE} =5V, I _C =500mA
*h _{FE} 1	100	-	-	-	V _{CE} =5V, I _C =50mA
*h _{FE} 2	100	-	270	-	V _{CE} =5V, I _C =100mA
*h _{FE} 3	80	-	-	-	V _{CE} =5V, I _C =800mA
f _T	50	-	-	MHz	V _{CE} =10V, I _C =50mA, f=100MHz
Cob	-	-	20	pF	V _{CB} =10V, I _E =0A, f=1MHz

*Pulse Test: Pulse Width ≤380μs, Duty Cycle≤2%

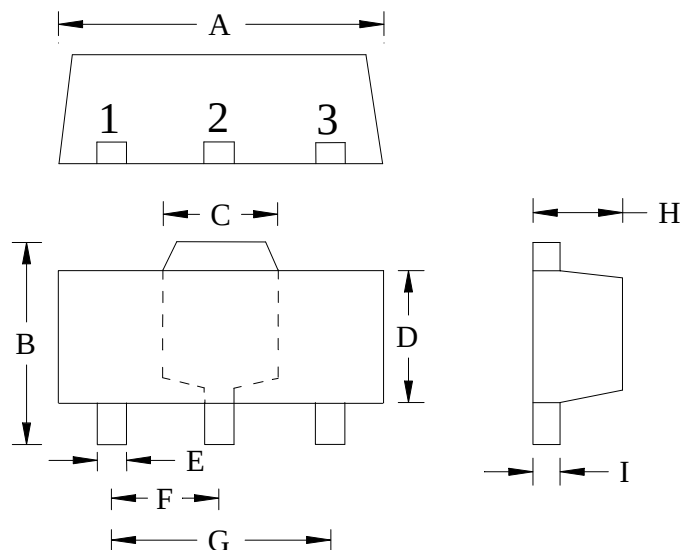
Classification Of h_{FE} 2

Rank	P	Q
Range	100~200	120~270

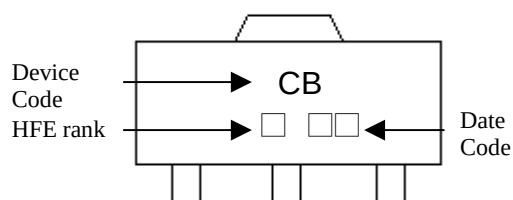
Typical Characteristics



SOT-89 Dimension



Marking:



Style: Pin 1. Base 2. Collector 3. Emitter

3-Lead SOT-89 Plastic
 Surface Mounted Package
 Code: M3

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0591	TYP	1.50	TYP
B	0.1551	0.1673	3.94	4.25	G	0.1181	TYP	3.00	TYP
C	0.0610	REF	1.55	REF	H	0.0551	0.0630	1.40	1.60
D	0.0906	0.1024	2.30	2.60	I	0.0138	0.0173	0.35	0.44
E	0.0126	0.0205	0.32	0.52					