

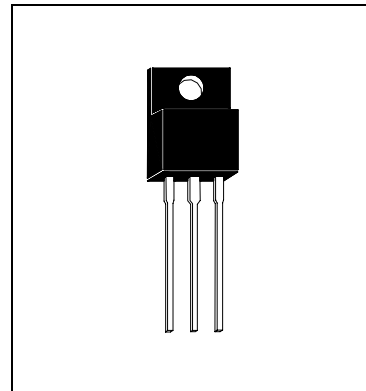


HTIF31C

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HTIF31C is designed for use in general purpose amplifier and switching applications.



Absolute Maximum Ratings (Ta=25°C)

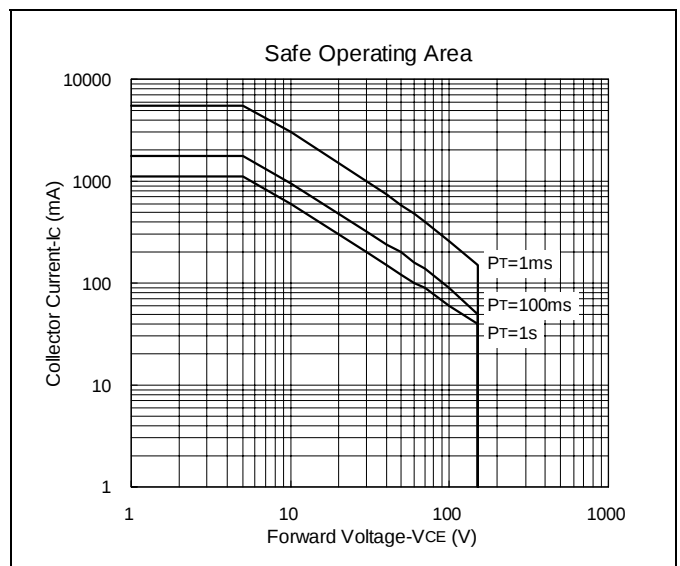
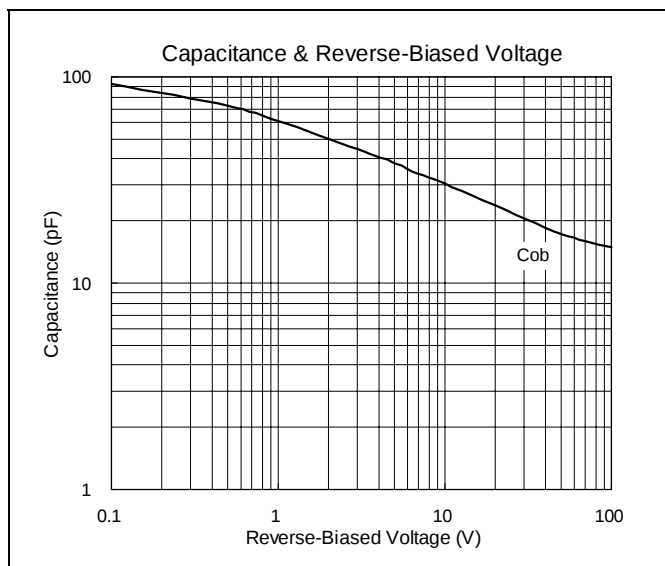
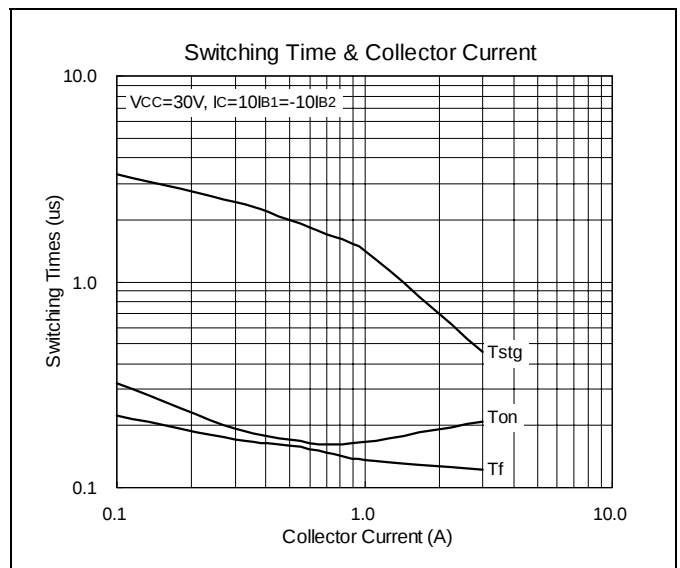
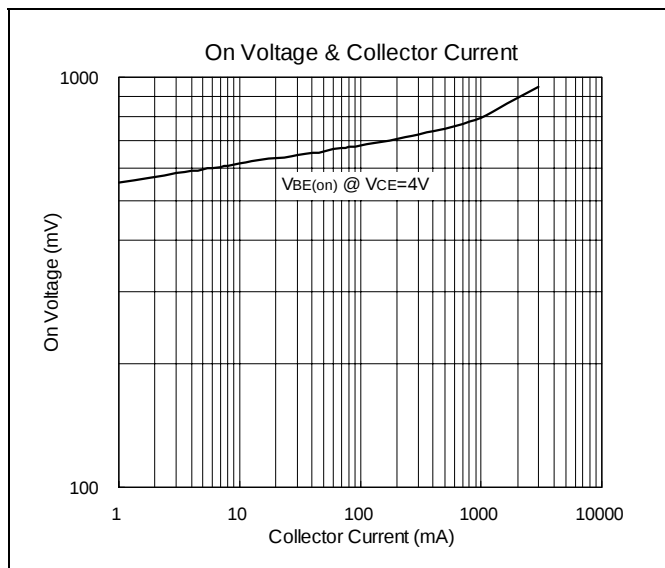
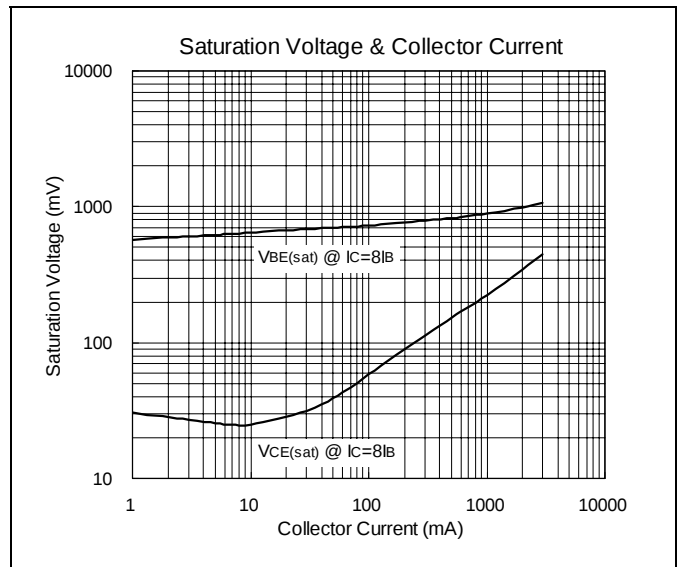
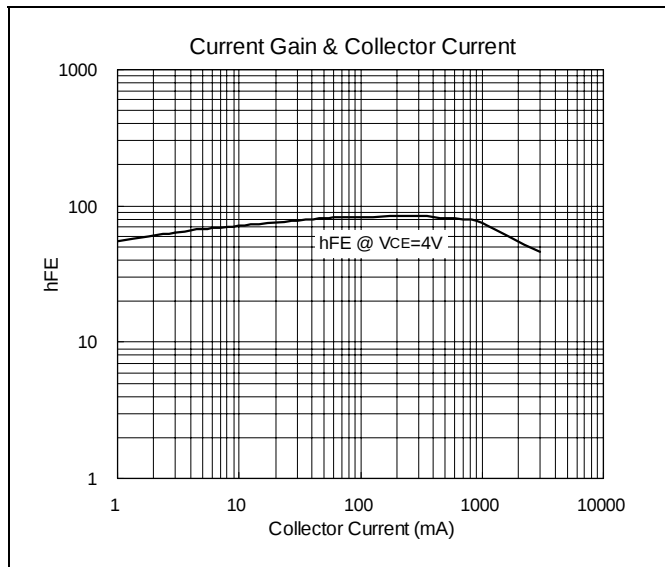
- Maximum Temperatures
Storage Temperature -55~+150°C
Junction Temperature +150°C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Tc=25°C) 30 W
- Maximum Voltages and Currents
BVCBO Collector to Base Voltage 100 V
BVCEO Collector to Emitter Voltage 100 V
BVEBO Emitter to Base Voltage 5 V
IC Collector Current 3 A

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	100	-	-	V	IC=1mA
BVCEO	100	-	-	V	IC=30mA
ICES	-	-	200	uA	VCE=100V
ICEO	-	-	300	uA	VCE=60V
IEBO	-	-	10	uA	VEB=5V
VCE(sat)	-	-	1.2	V	IC=3A, IB=375mA
VBE(on)	-	-	1.8	V	IC=3A, VCE=4V
hFE1	25	-	-		IC=1A, VCE=4V
hFE2	10	-	50		IC=3A, VCE=4V
fT	3	-	-	MHz	IC=0.5A, VCE=10V

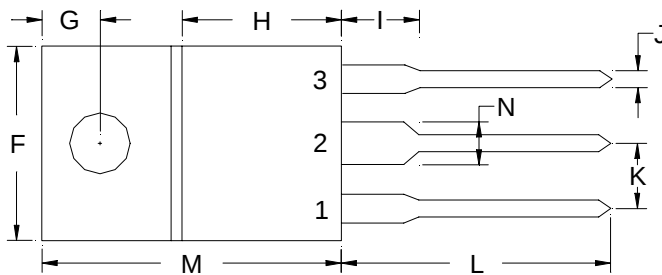
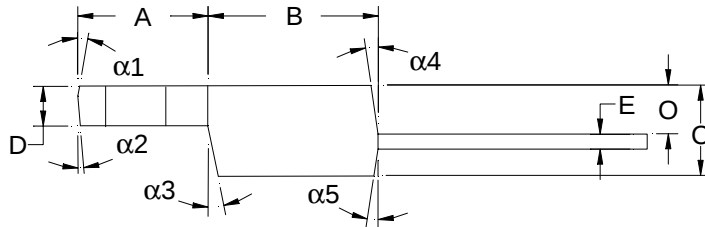


Characteristics Curve



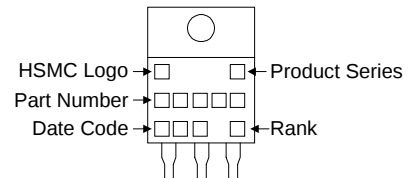


TO-220FP Dimension



3-Lead TO-220FP Plastic Package
HSMC Package Code : F

Marking :



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

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.2480	0.2520	6.30	6.40	K	-	*0.1004	-	*2.55
B	0.3386	0.3425	8.60	8.70	L	0.5118	0.5906	13.00	15.00
C	0.1673	0.1870	4.25	4.75	M	0.5886	0.5925	14.95	15.05
D	0.1043	0.1083	2.65	2.75	N	-	*0.0669	-	*1.70
E	0.0230	0.0242	0.58	0.61	O	0.1098	0.1114	2.79	2.83
F	0.3980	0.4039	10.11	10.26	1	-	-2°	-	*2°
G	0.1083	0.1122	2.75	2.85	2	-	*5°	-	*5°
H	0.3386	0.3425	8.60	8.70	3	-	*15°	-	*15°
I	-	*0.1496	-	*3.80	4	-	*5°	-	*5°
J	-	*0.0236	-	*0.60	5	-	*5°	-	*5°

Notes : 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.

2.Controlling dimension : millimeters.

3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.

4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material :

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory :

- **Head Office** (Hi-Sincerity Microelectronics Corp.) : 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
Tel : 886-2-25212056 Fax : 886-2-25632712, 25368454
- **Factory 1** : No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel : 886-3-5983621~5 Fax : 886-3-5982931
- **Factory 2** : No. 17-1, Ta-Tung Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel : 886-3-5977061 Fax : 886-3-5979220