

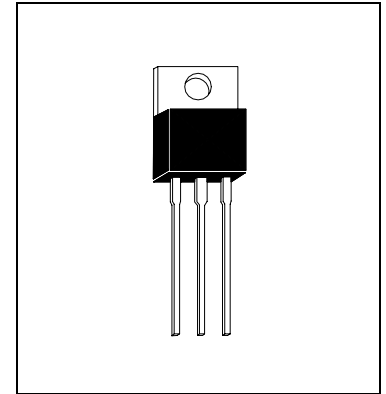


# HTIP47

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HTIP47 is designed for high voltage switch switching applications.



## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
  - Storage Temperature ..... -50 ~ +150 °C
  - Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 40 W
- Maximum Voltages and Currents
  - BVCBO Collector to Base Voltage ..... 350 V
  - BVCEO Collector to Emitter Voltage ..... 250 V
  - BVEBO Emitter to Base Voltage ..... 5 V
  - IC Collector Current ..... 1 A

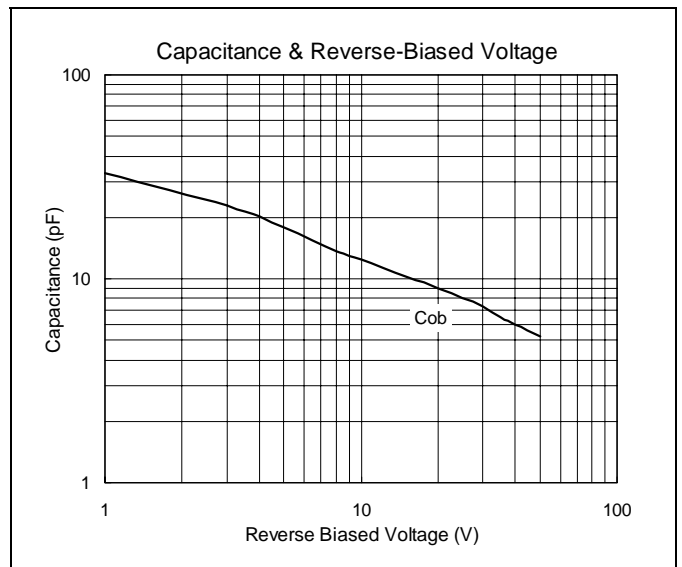
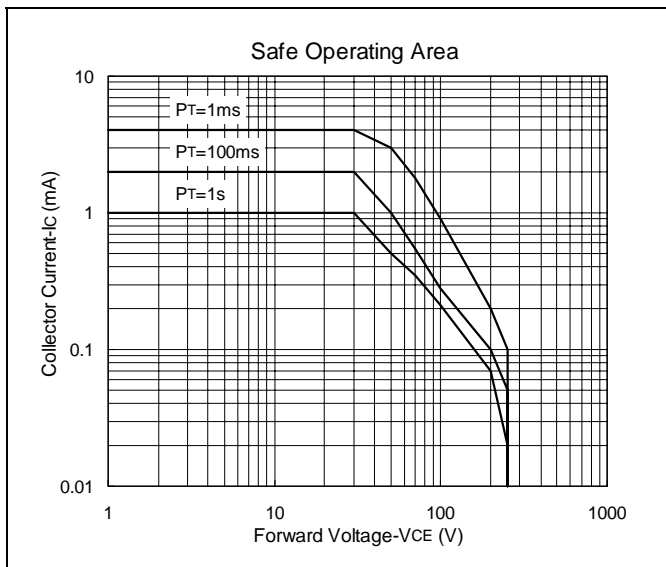
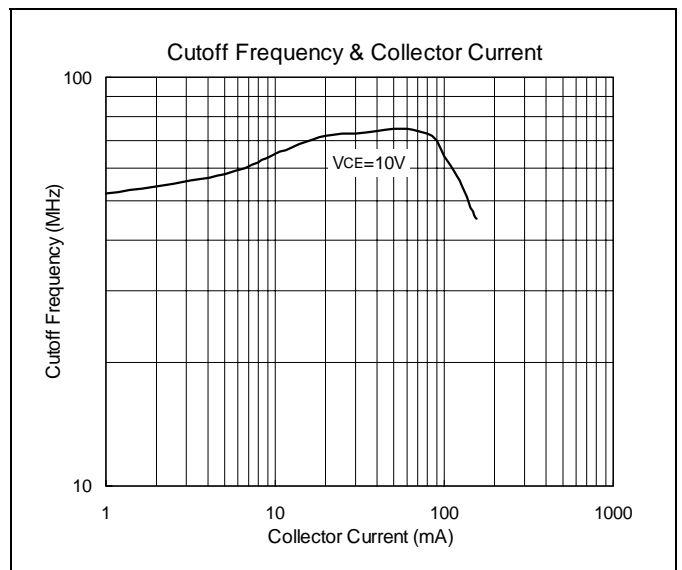
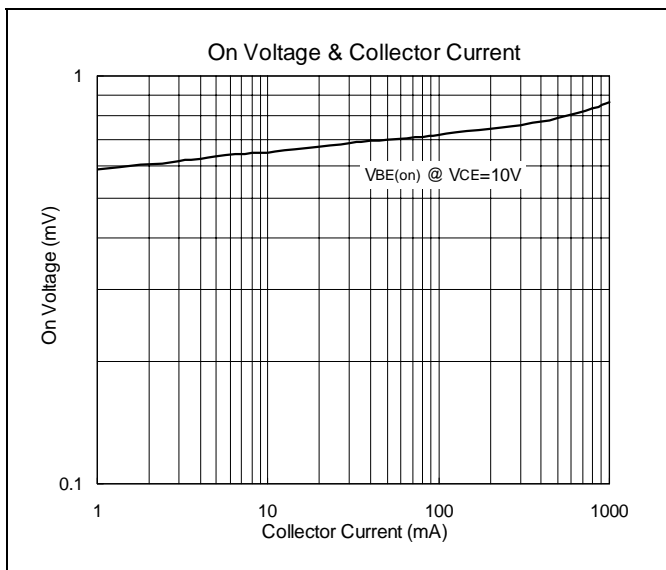
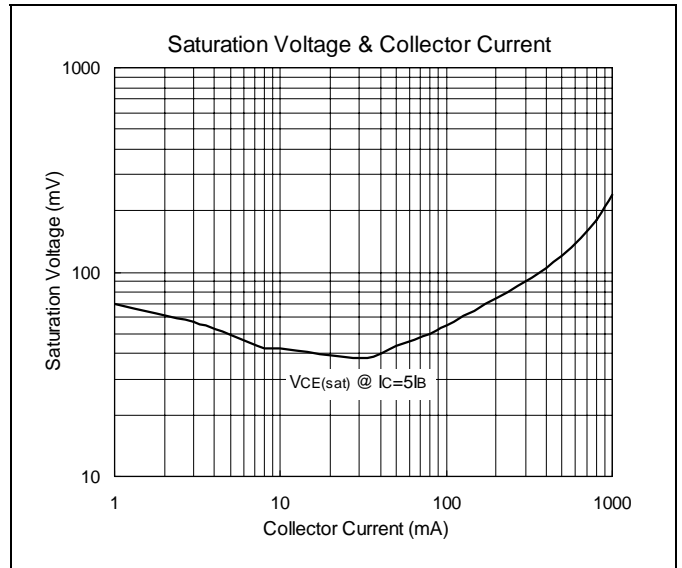
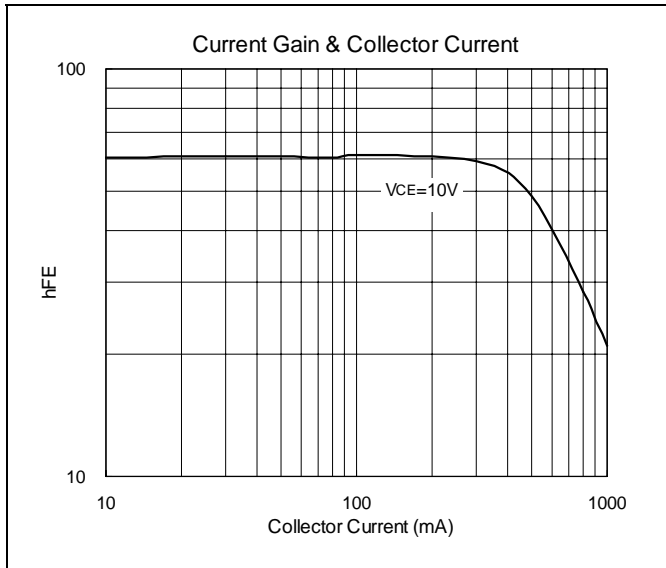
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	350	-	-	V	IC=1mA
BVCEO	250	-	-	V	IC=30mA
BVEBO	5	-	-	V	IE=0.1mA
IEBO	-	-	1	mA	VEB=5V
ICEO	-	-	1	mA	VCE=150V
ICES	-	-	1	mA	VCE=350V
*VCE(sat)	-	-	1	V	IC=1A, IB=0.2A
*VBE(on)	-	-	1.5	V	IC=1A, VCE=10V
*hFE1	30	-	150		IC=0.3A, VCE=10V
*hFE2	10	-	-		IC=1A, VCE=10V
fT	10	-	-	MHz	IC=0.2A, VCE=10V, f=2MHz

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

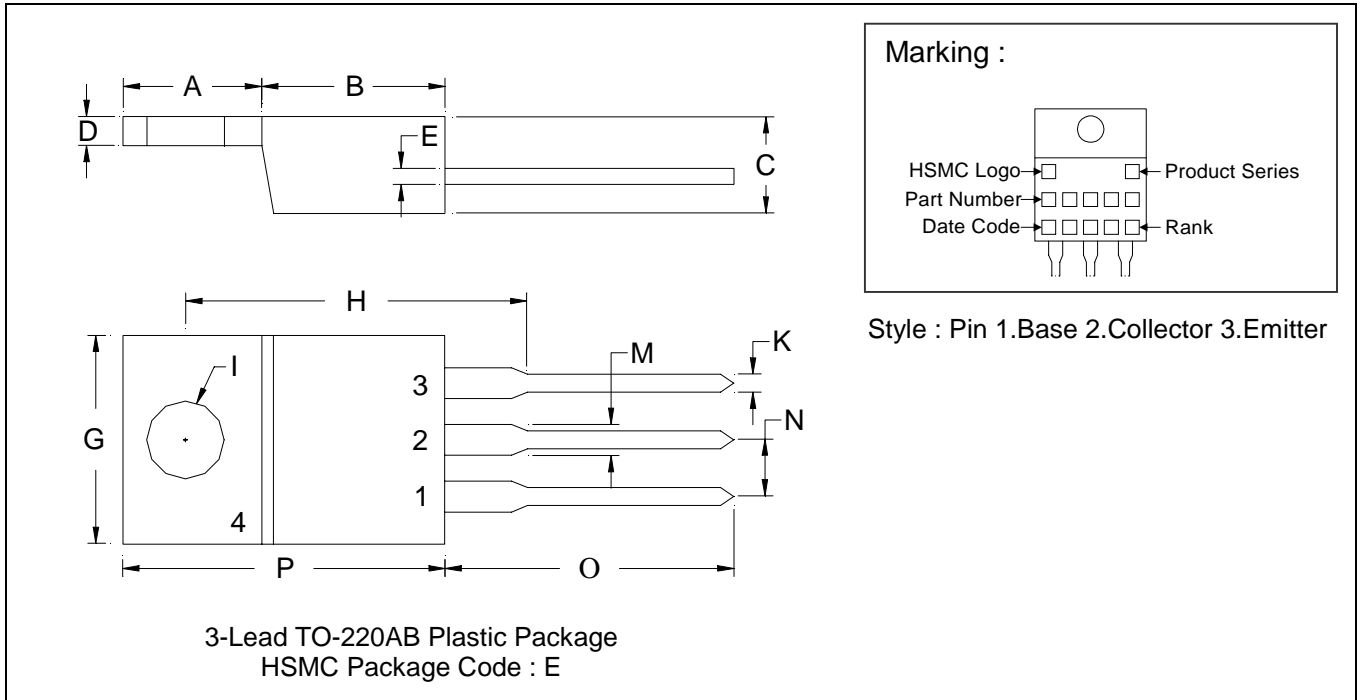


### Characteristics Curve





### TO-220AB Dimension



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.2197	0.2949	5.58	7.49	I	-	*0.1508	-	*3.83
B	0.3299	0.3504	8.38	8.90	K	0.0295	0.0374	0.75	0.95
C	0.1732	0.185	4.40	4.70	M	0.0449	0.0551	1.14	1.40
D	0.0453	0.0547	1.15	1.39	N	-	*0.1000	-	*2.54
E	0.0138	0.0236	0.35	0.60	O	0.5000	0.5618	12.70	14.27
G	0.3803	0.4047	9.66	10.28	P	0.5701	0.6248	14.48	15.87
H	-	*0.6398	-	*16.25					

- 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

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