



HAD826SP

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HAD826SP is designed for general purpose amplifier and high speed, medium-power switching applications.

Features

- Low Collector Saturation Voltage
- High Speed Switching

Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature..... -55 ~ +150 °C
 Junction Temperature..... 150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C)..... 500 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage..... 75 V
 VCEO Collector to Emitter Voltage 40 V
 VEBO Emitter to Base Voltage 6 V
 IC Collector Current 500 mA

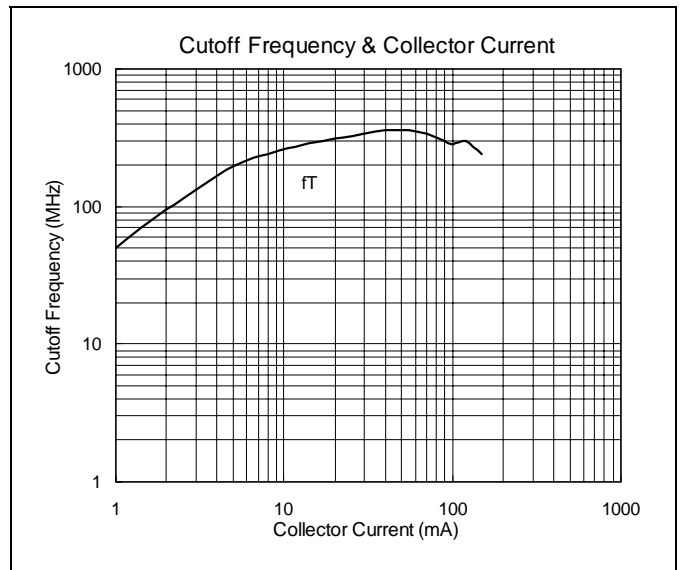
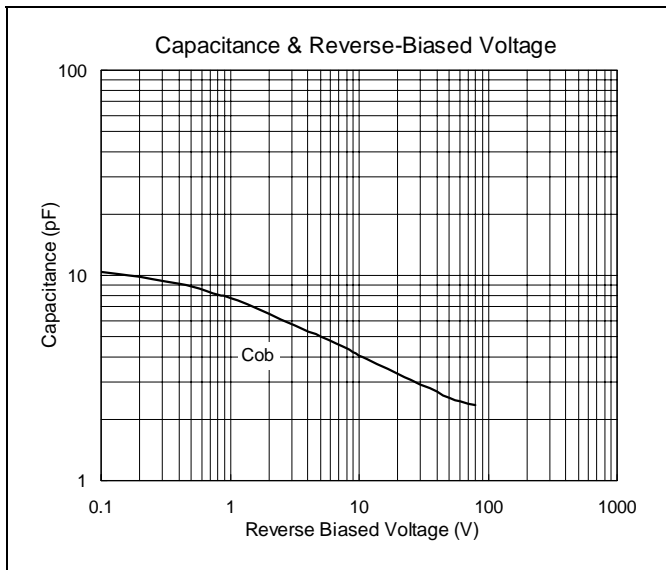
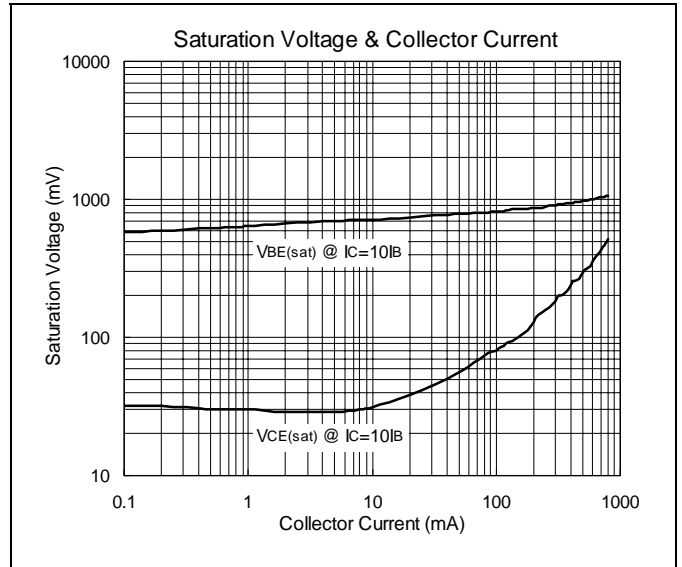
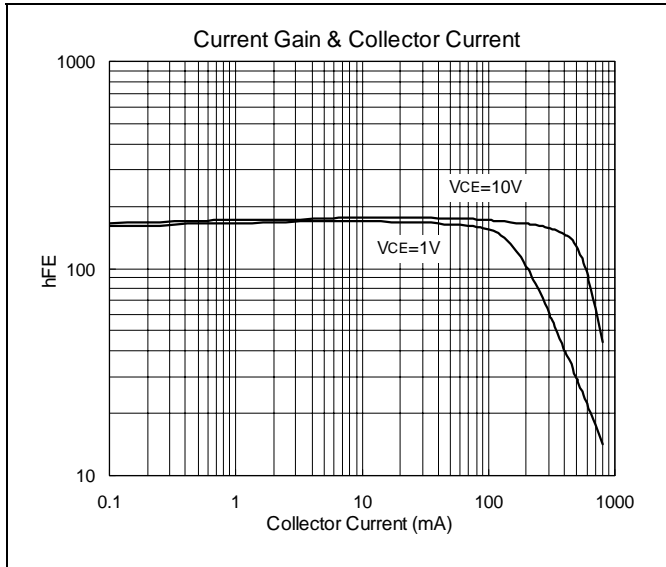
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	75	-	-	V	IC=10uA, IE=0
BVCEO	40	-	-	V	IC=10mA, IB=0
BVEBO	6	-	-	V	IE=10uA, IC=0
ICBO	-	-	10	nA	VCB=60V, IE=0
ICEX	-	-	10	nA	VCB=60V, VEB(OFF)=3V
IEBO	-	-	50	nA	VEB=3V, IC=0
*VCE(sat)1	-	-	300	mv	IC=150mA, IB=15mA
*VCE(sat)2	-	-	1	V	IC=500mA, IB=50mA
*VBE(sat)1	-	-	1.2	V	IC=150mA, IB=15mA
*VBE(sat)2	-	-	2	V	IC=500mA, IB=50mA
*hFE1	35	-	-		VCE=10V, IC=100uA
*hFE2	50	-	-		VCE=10V, IC=1mA
*hFE3	75	-	-		VCE=10V, IC=10mA
*hFE4	100	-	300		VCE=10V, IC=150mA
*hFE5	40	-	-		VCE=10V, IC=500mA
*hFE6	50	-	-		VCE=1V, IC=150mA
fT	300	-	-	MHz	VCE=20V, IC=20mA, f =100MHz
Cob	-	-	8	pF	VCB=10V, f=1MHz

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



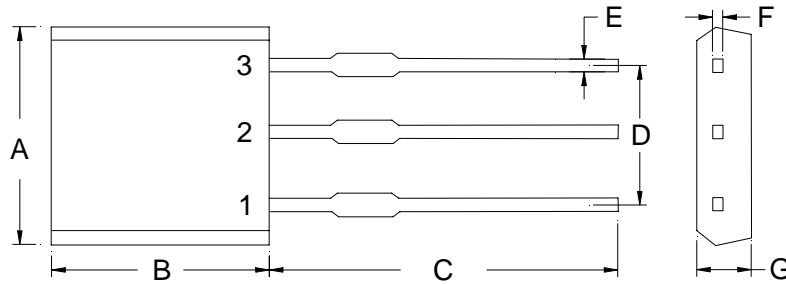
Characteristics Curve





TO-92SP Dimension

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



3-Lead TO-92SP Plastic Package, HSMC Package Code : N

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1450	0.1650	3.70	4.20	E	0.0160	0.0240	0.41	0.61
B	0.1063	0.1300	2.70	3.30	F	-	*0.0150	-	*0.38
C	0.5000	-	12.7	-	G	0.0800	0.1050	2.03	2.67
D	-	*0.1000	-	*2.54					

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