

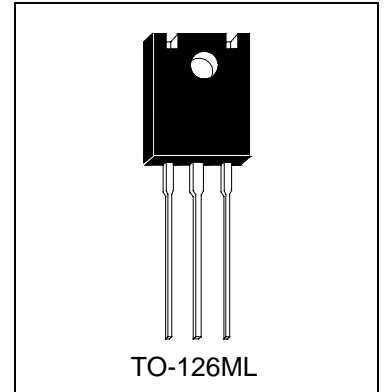


HSD882

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSD882 is designed for using in output stage of 1w audio amplifier, voltage regulator, DC-DC converter and relay driver.



Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
 - Storage Temperature -55 ~ +150 °C
 - Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Ta=25°C) 1 W
 - Total Power Dissipation (Tc=25°C) 10 W
- Maximum Voltages and Currents
 - BVCBO Collector to Base Voltage 40 V
 - BVCEO Collector to Emitter Voltage 30 V
 - BVEBO Emitter to Base Voltage 5 V
 - IC Collector Current (DC) 3 A
 - IC Collector Current (Pulse) 7 A
 - IB Base Current (DC) 0.6 A

Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA
BVCEO	30	-	-	V	IC=1mA
BVEBO	5	-	-	V	IE=10uA
ICBO	-	-	1	uA	VCB=30V
IEBO	-	-	1	uA	VEB=3V
*VCE(sat)	-	0.3	0.5	V	IC=2A, IB=0.2A
*VBE(sat)	-	1	2	V	IC=2A, IB=0.2A
*hFE1	30	150	-		IC=20mA, VCE=2V
*hFE2	100	200	500		IC=1A, VCE=2V
fT	-	90	-	MHz	IC=0.1A, VCE=5V
Cob	-	45	-	pF	VCB=10V, f=1MHz, IE=0

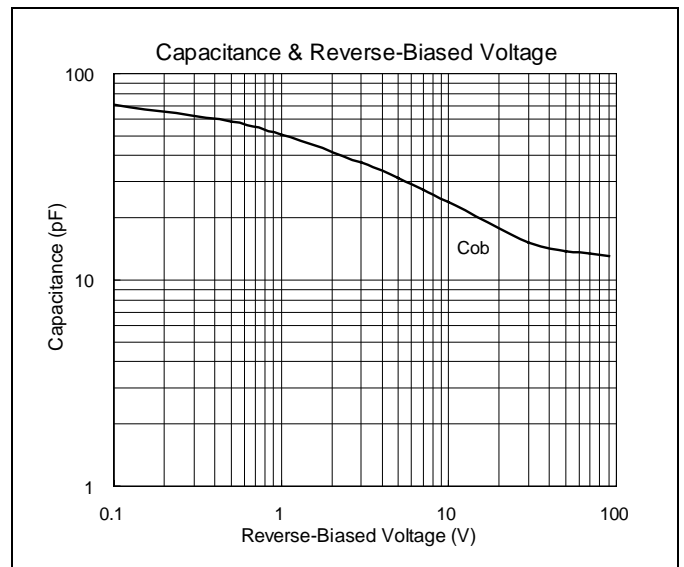
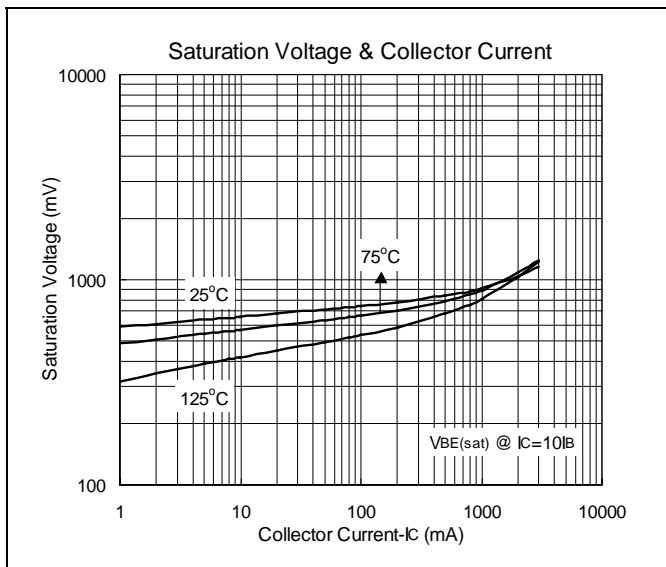
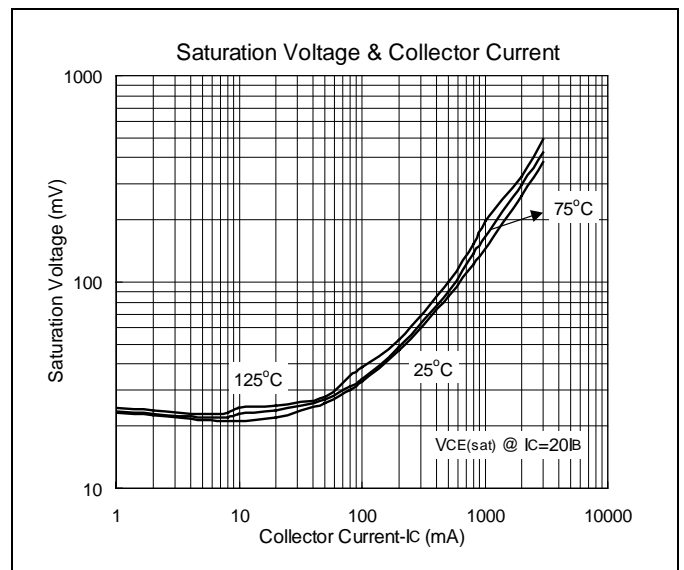
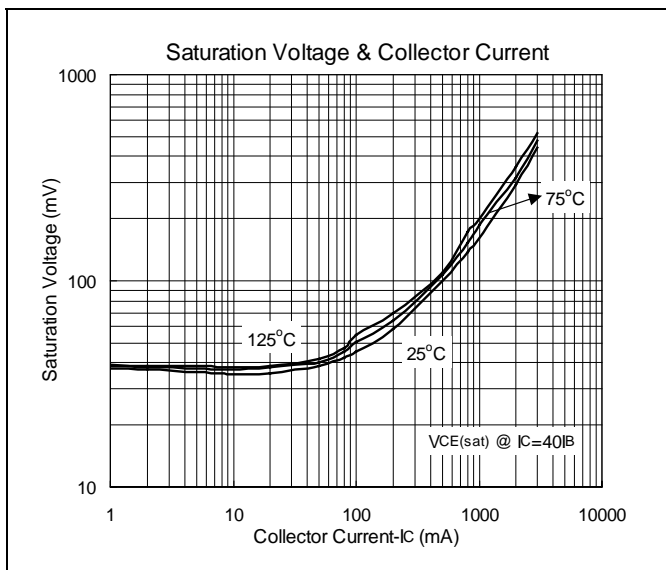
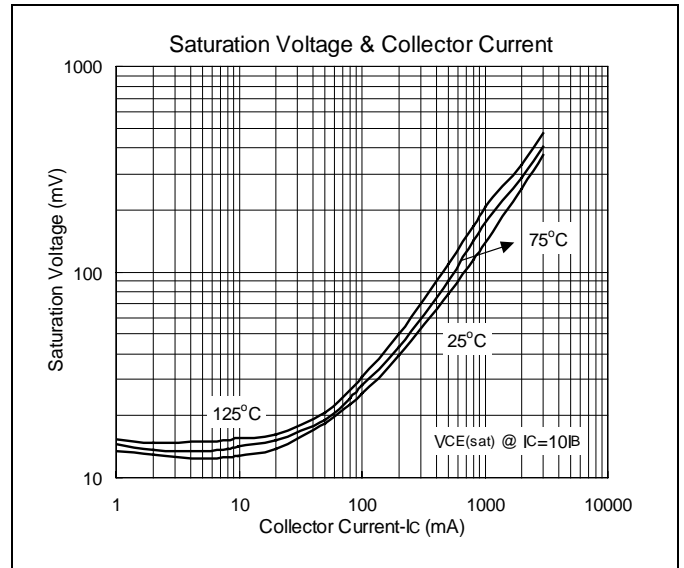
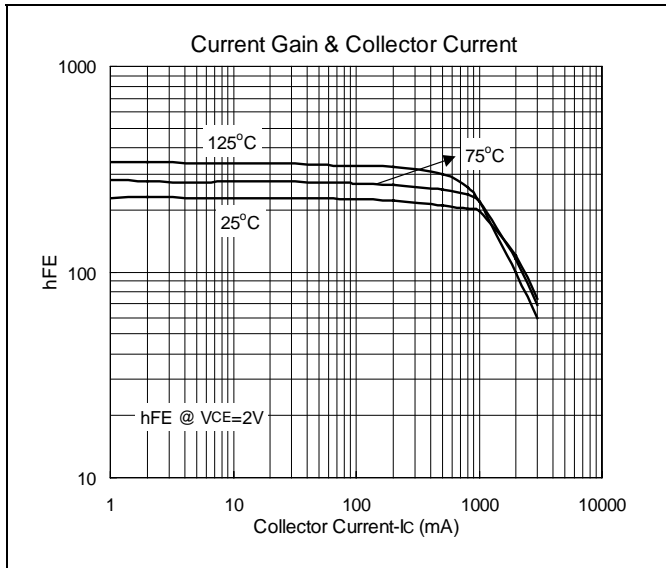
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

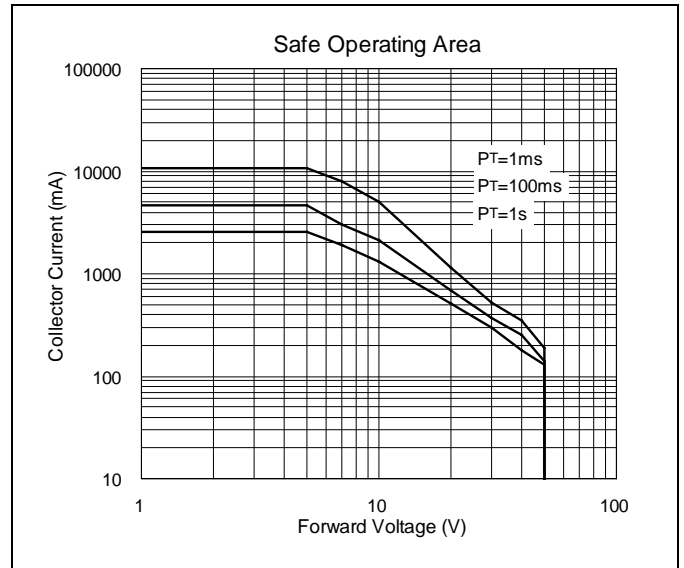
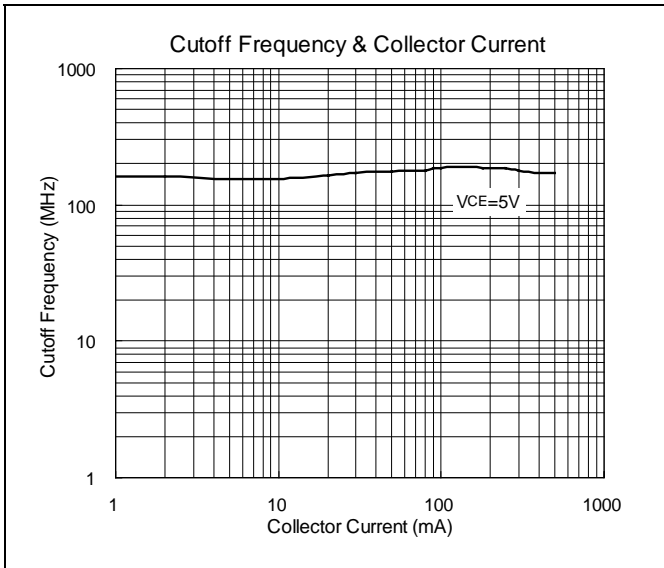
Classification Of hFE2

Rank	Q	P	E
Range	100-200	160-320	250-500



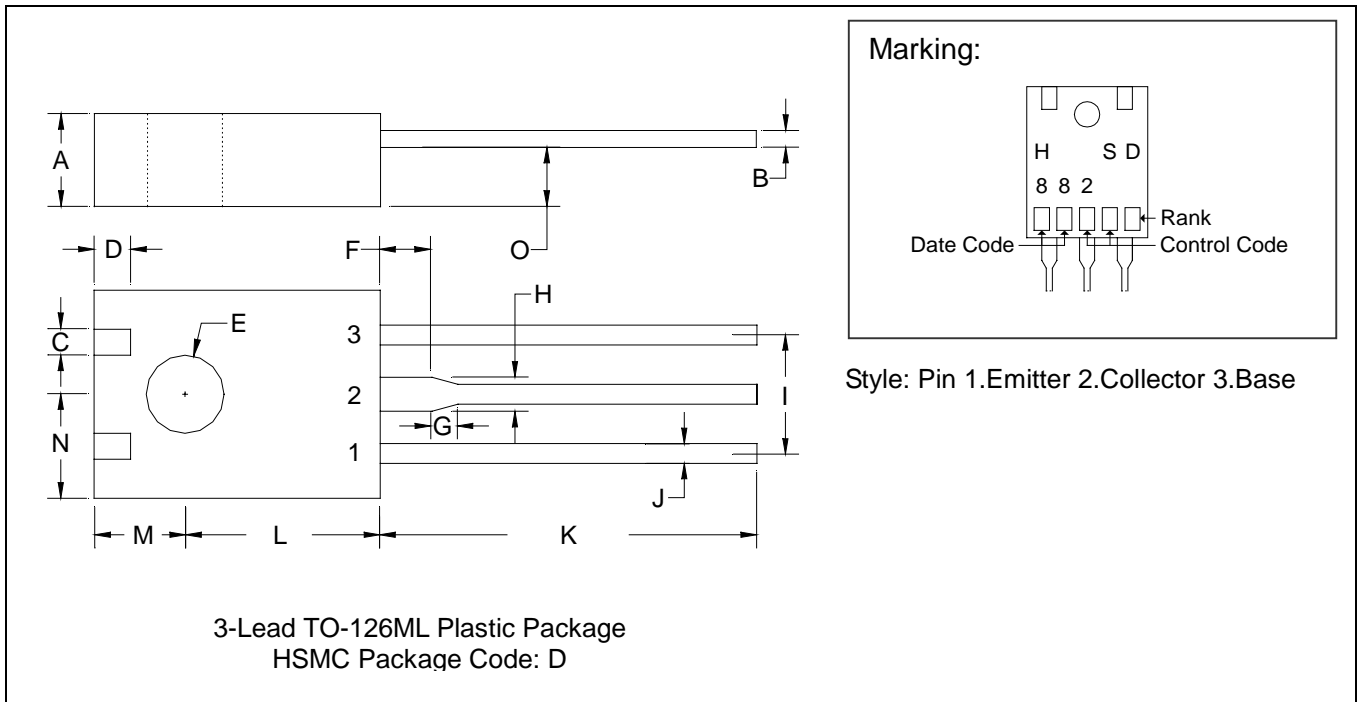
Characteristics Curve







TO-126ML Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1356	0.1457	3.44	3.70	I	-	*0.1795	-	*4.56
B	0.0170	0.0272	0.43	0.69	J	0.0268	0.0331	0.68	0.84
C	0.0344	0.0444	0.87	1.12	K	0.5512	0.5906	14.00	15.00
D	0.0501	0.0601	1.27	1.52	L	0.2903	0.3003	7.37	7.62
E	0.1131	0.1231	2.87	3.12	M	0.1378	0.1478	3.50	3.75
F	0.0737	0.0837	1.87	2.12	N	0.1525	0.1625	3.87	4.12
G	0.0294	0.0494	0.74	1.25	O	0.0740	0.0842	1.88	2.14
H	0.0462	0.0562	1.17	1.42					

Notes: 1.Dimension and tolerance based on our Spec. dated Mar. 6,1995.
 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