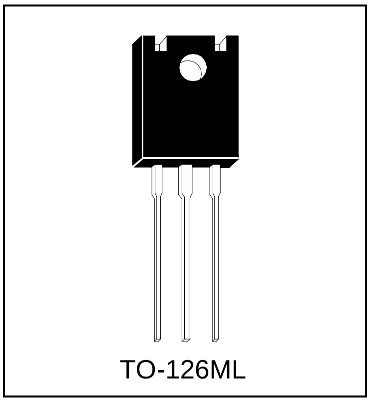
HSB649A

SILICON PNP EPITAXIAL PLANAR TRANSISTOR


TO-126ML

Description

Low frequency power amplifier complementary pair with HSD669A.

Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
  Storage Temperature .... -55 ~ +150 °C
  Junction Temperature .... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation .... 1 W
  Total Power Dissipation (Tc=25°C) .... 20 W
- Maximum Voltages and Currents
  BVCBO Collector to Base Voltage .... -180 V
  BVCEO Collector to Emitter Voltage .... -160 V
  BVEBO Emitter to Base Voltage .... -5 V
  IC Collector Current (DC) .... -1.5 A
  IC Collector Current (Pulse) .... -3 A

Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-180	-	-	V	IC=-1mA, IE=0
BVCEO	-160	-	-	V	IC=-10mA, IB=0
BVEBO	-5	-	-	V	IE=-1mA, IC=0
ICBO	-	-	-10	uA	VCB=-160V, IE=0
*VCE(sat)	-	-	-1	V	IC=-500mA, IB=-50mA
*VBE(on)	-	-	-1.5	V	IC=-150mA, VCE=-5V
*hFE1	60	-	200		IC=-150mA, VCE=-5V
*hFE2	30	-	-		IC=-500mA, VCE=-5V
fT	-	140	-	MHz	IC=-150mA ,VCE=-5V
Cob	-	27	-	pF	VCB=-10V, f=1MHz, IE=0

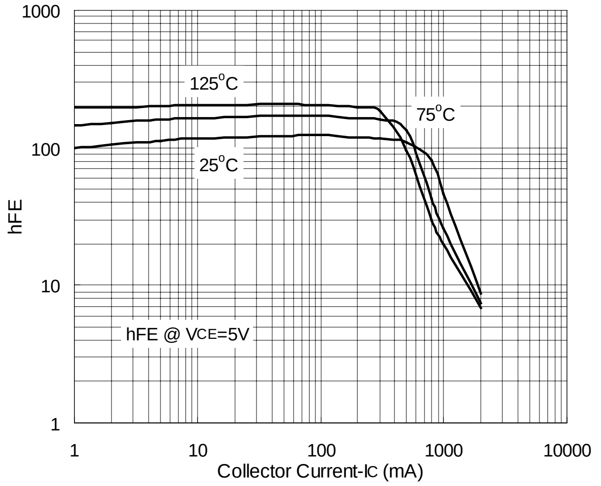
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE1

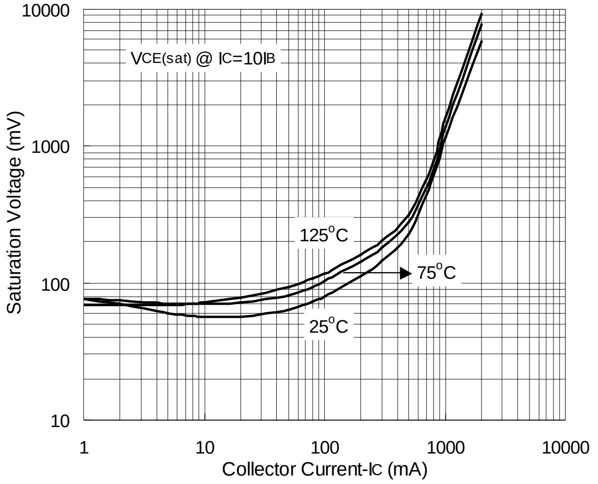
Rank	B	C
Range	60-120	100-200

Characteristics Curve

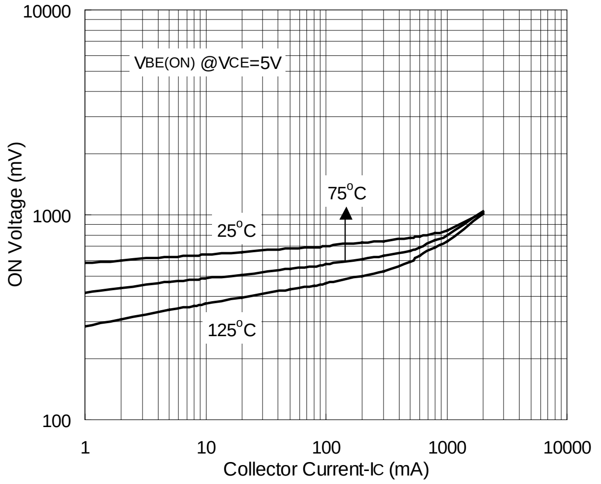
Current Gain & Collector Current



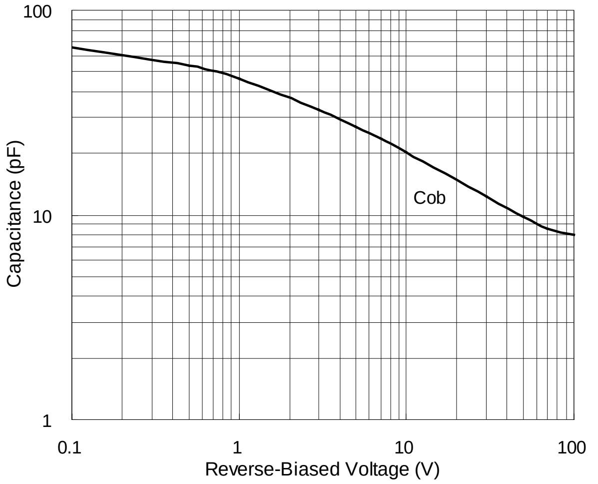
Saturation Voltage & Collector Current



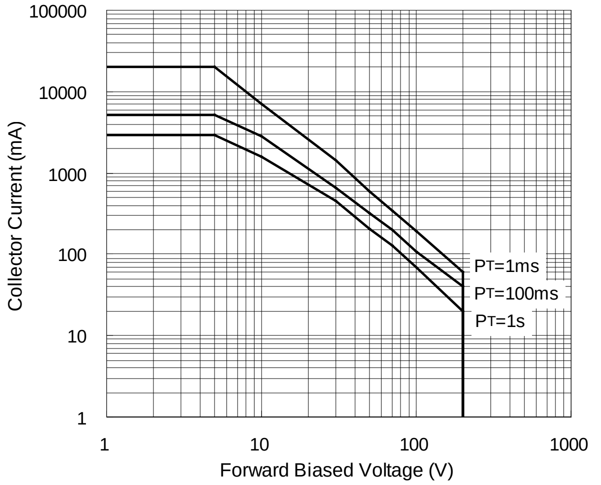
ON Voltage & Collector Current



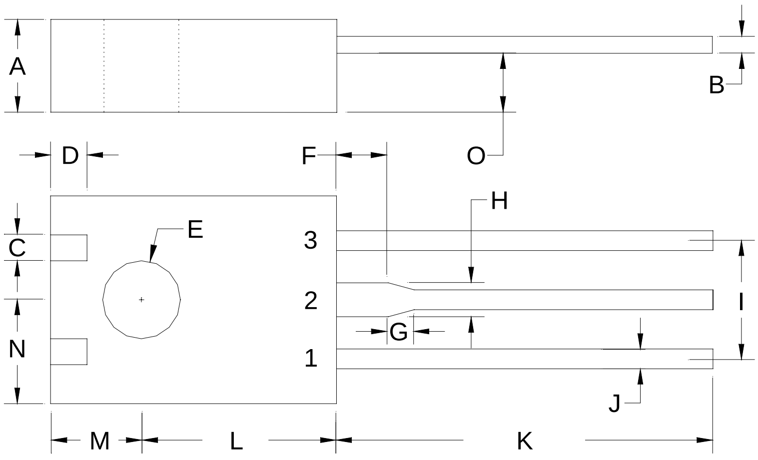
Capacitance & Reverse-Biased Voltage



Safe Operating Area

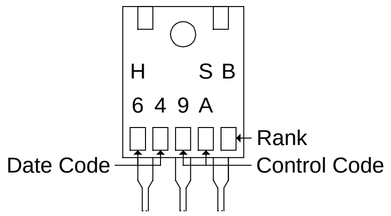


TO-126ML Dimension



3-Lead TO-126ML Plastic Package
HSMC Package Code: D

Marking:



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

*: 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

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