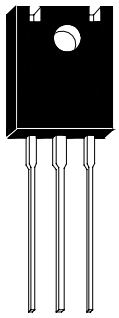
HSA1300D

SILICON PNP EPITAXIAL TYPE



TO-126ML

Description

- Strobo Flash Applications
- Medium Power Amplifier Applications

Features

- High DC Current Gain and Excellenr hFE Linearity
- hFE(1)=140-600, (VCE=-1V, IC=-0.5A)
- hFE(2)=60 (Min.), 120(Typ.), (VCE=-1V, IC=-4A)
- Low Saturation Voltage.
- VCE(sat)=-0.5V(Max.), (IC=-2A, IE=-50mA)

Absolute Maximum Ratings (Ta=25°C)

Characteristic		Symbol	Ratios	Unit
Collector-Base Voltage		VCBO	-20	V
Collector-Emitter Voltage		VCES	-20	V
		VCEO	-10	
Emitter-Base Voltage		VEBO	-6	V
Collector Current	DC	IC	-2	A
	Pulsed (Note1)	ICP	-5	
Base Current		IB	-2	A
Collector Power Dissipation		PC	1.5	W
Junction Temperature		Tj	150	°C
Storage Temperature Range		Tstg	-55~150	°C

Note 1: Pulse Width=10ms(Max.), Duty Cycle=30%(Max.)

Electrical Characteristics (Ta=25°C)

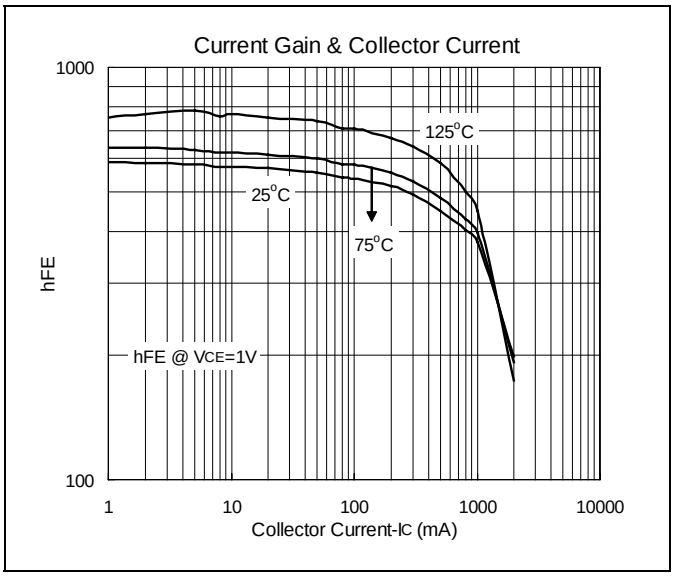
Symbol	Min.	Typ.	Max.	Unit	Test Condition
V(BR)CEO	-10	-	-	V	IC=10mA, IB=0
V(BR)EBO	-6	-	-	V	IE=-1mA, IC=0
ICBO	-	-	-100	nA	VCE=-20V, IE=0
IEBO	-	-	-100	nA	VBE=-6V, IC=0
*hFE(1) (Note 2)	140	-	600		VCE=-1V, IC=0.5A
*hFE(2)	60	120	-		VCE=-1V, IC=-4A
*VCE(sat)	-	-0.20	-0.50	V	IC=-2A, IB=-50mA
VBE	-	-0.83	-1.5	V	VCE=-1V, IC=-2A
fT	-	140	-	MHz	VCE=-1V, IC=-0.5A
Cob	-	50	-	pF	VCE=-10V, IE=0, f=1KHZ

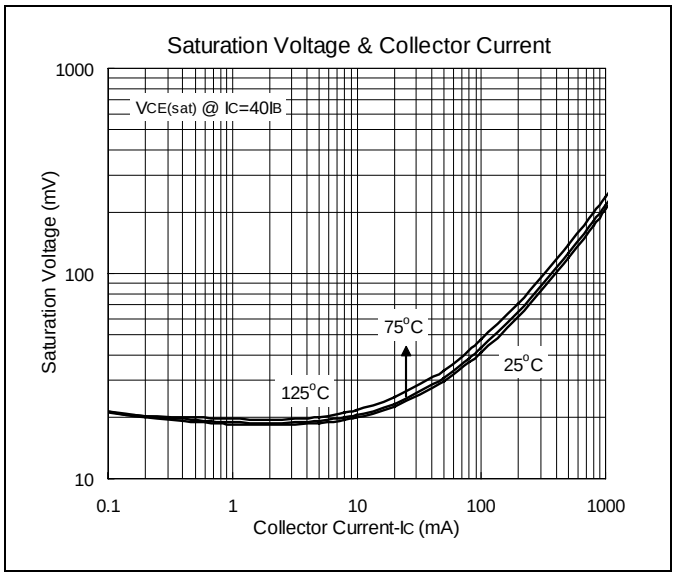
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

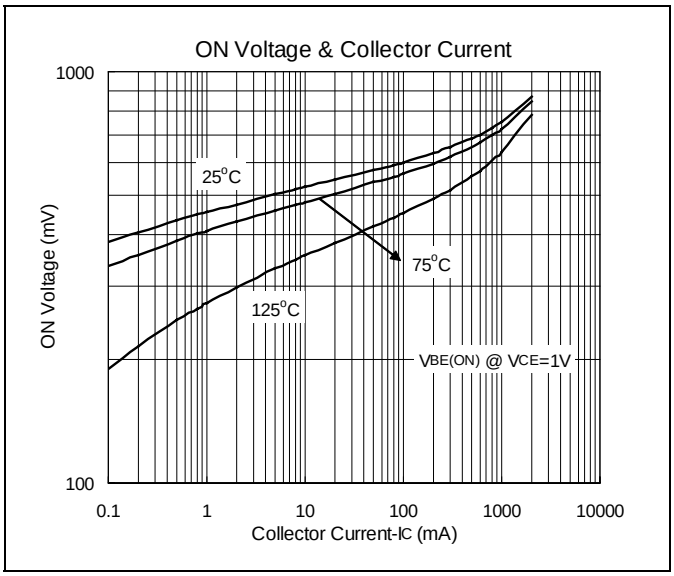
Classifications of hFE

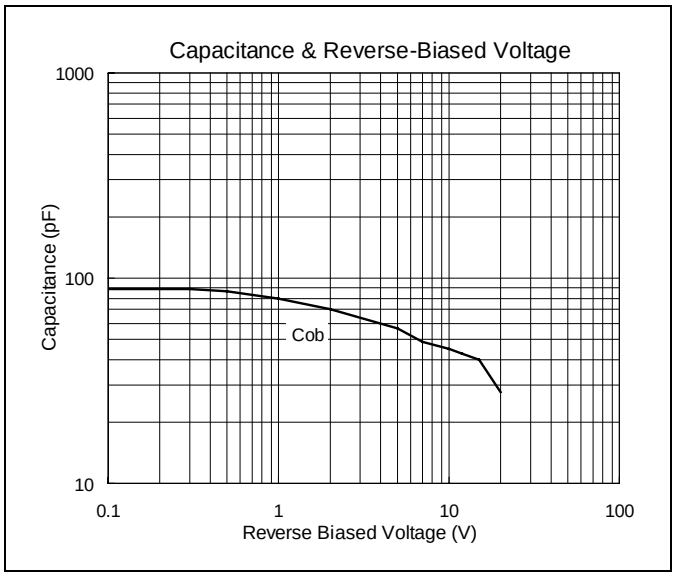
Rank	Y	GR	EL
hFE(1)	140-280	200-400	300-600

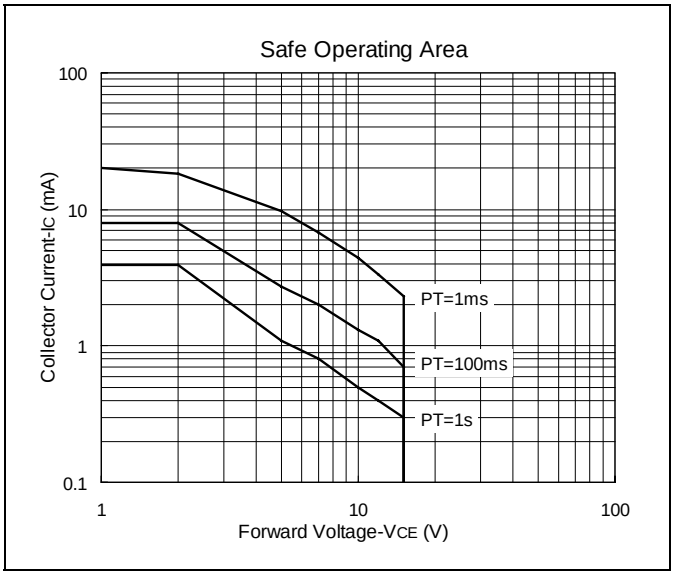
Characteristics Curve



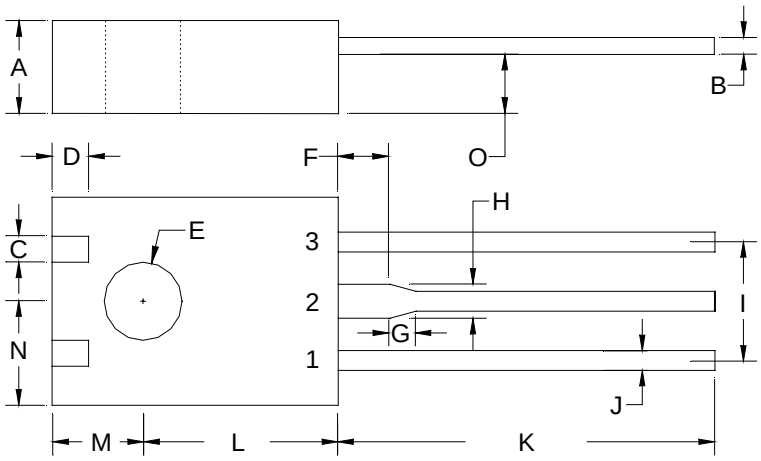




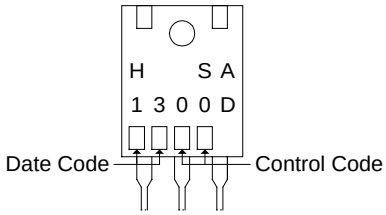




TO-126ML Dimension



Marking:



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

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

*: 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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