



HSC3953

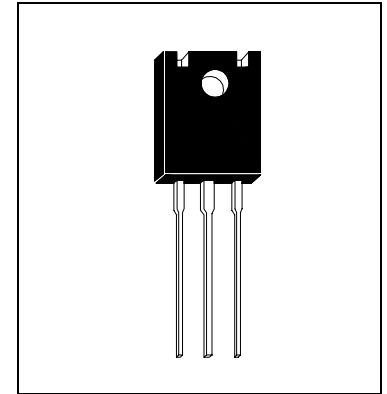
NPN EPITAXIAL PLANAR TRANSISTOR

Description

High-definition CRT display video output, wide-band amplifier.

Features

- High f_T : 500MHz
- High Breakdown Voltage: $BV_{CEO}=120V_{min}$
- Small Reverse Transfer Capacitance & Excellent HF Response: $C_{re}=1.7pF$



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) 1.3 W
Total Power Dissipation (Tc=25°C) 8 W
- Maximum Voltages and Currents
BVCBO Collector to Base Voltage 120 V
BVCEO Collector to Emitter Voltage 120 V
BVEBO Emitter to Base Voltage 3 V
IC Collector Current 200 mA
Icp Peak Collector Current 400 mA

Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	120	-	-	V	IC=100uA, IE=0
BVCEO	120	-	-	V	IC=1mA, IB=0
BVEBO	3	-	-	V	IE=100uA, IC=0
ICBO	-	-	0.1	uA	VCB=120V, IE=0
IEBO	-	-	0.1	uA	VEB=2V
*VCE(sat)	-	-	1	V	IC=30mA, IB=3mA
*VBE(sat)	-	-	1	V	IC=30mA, IB=3mA
*hFE1	60	-	320		IC=10mA, VCE=10V
*hFE2	40	-	-		IC=100mA, VCE=10V
fT	-	400	-	MHz	IC=50mA, VCE=10V

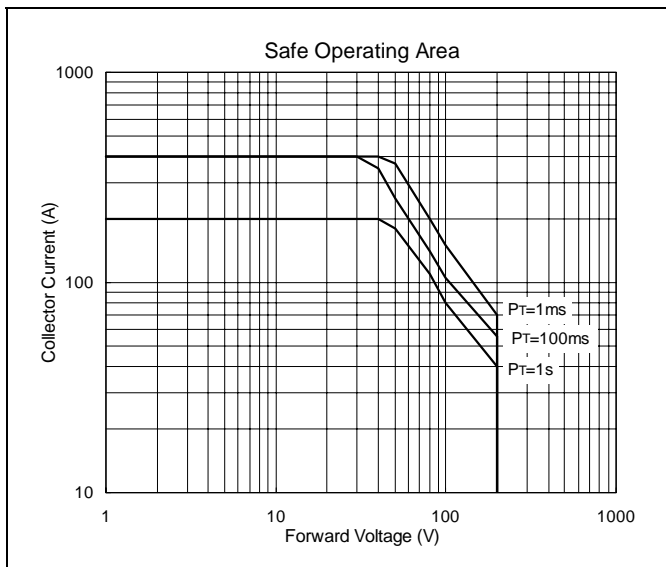
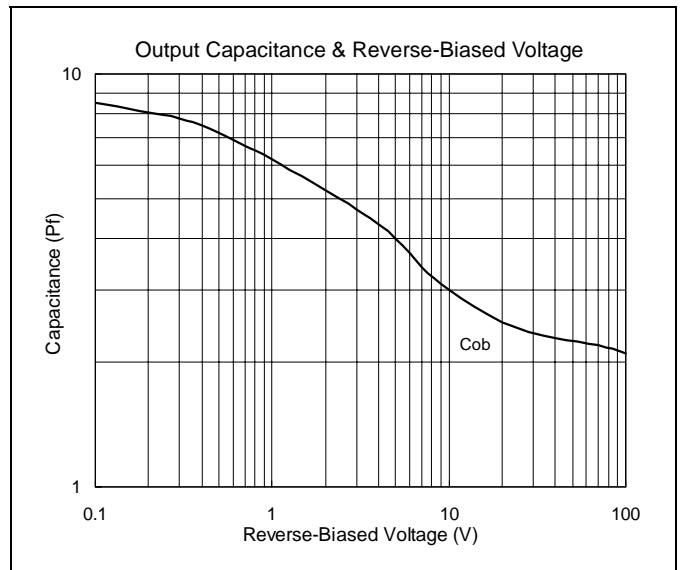
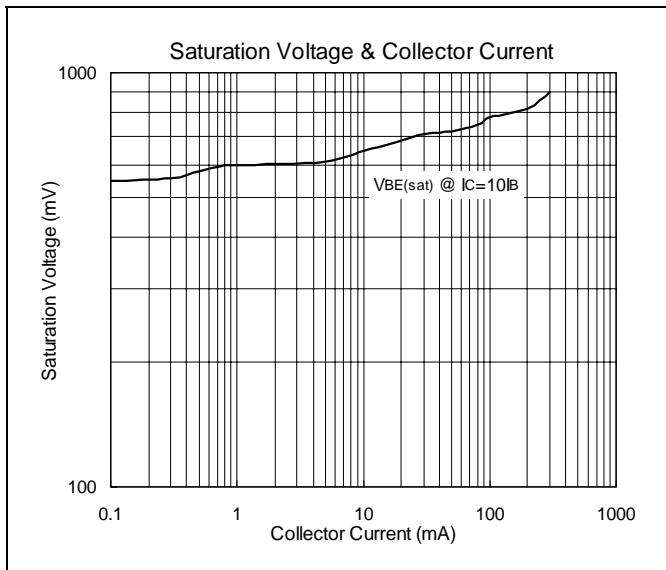
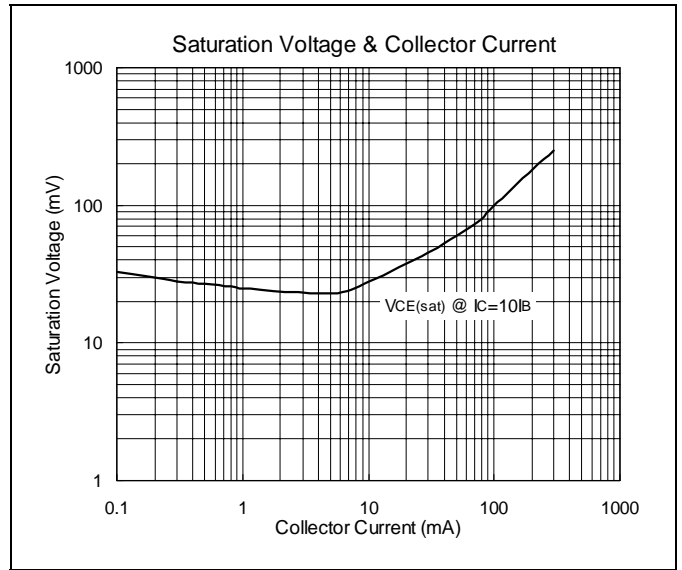
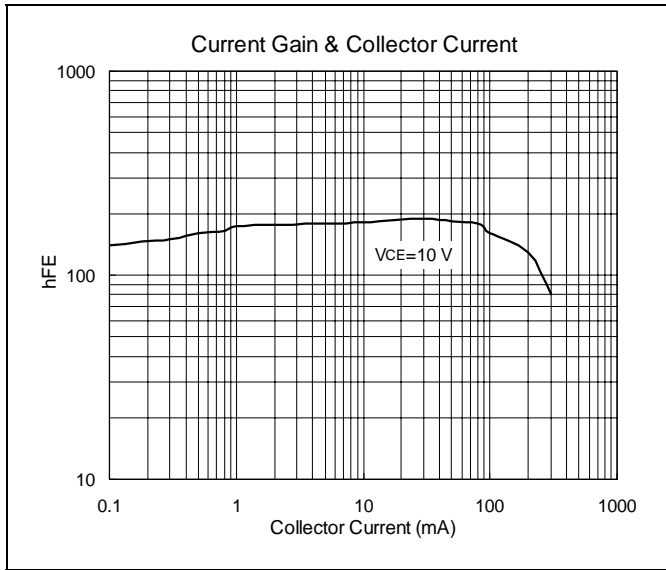
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE1

Rank	D	E	F
Range	60-120	100-200	160-320

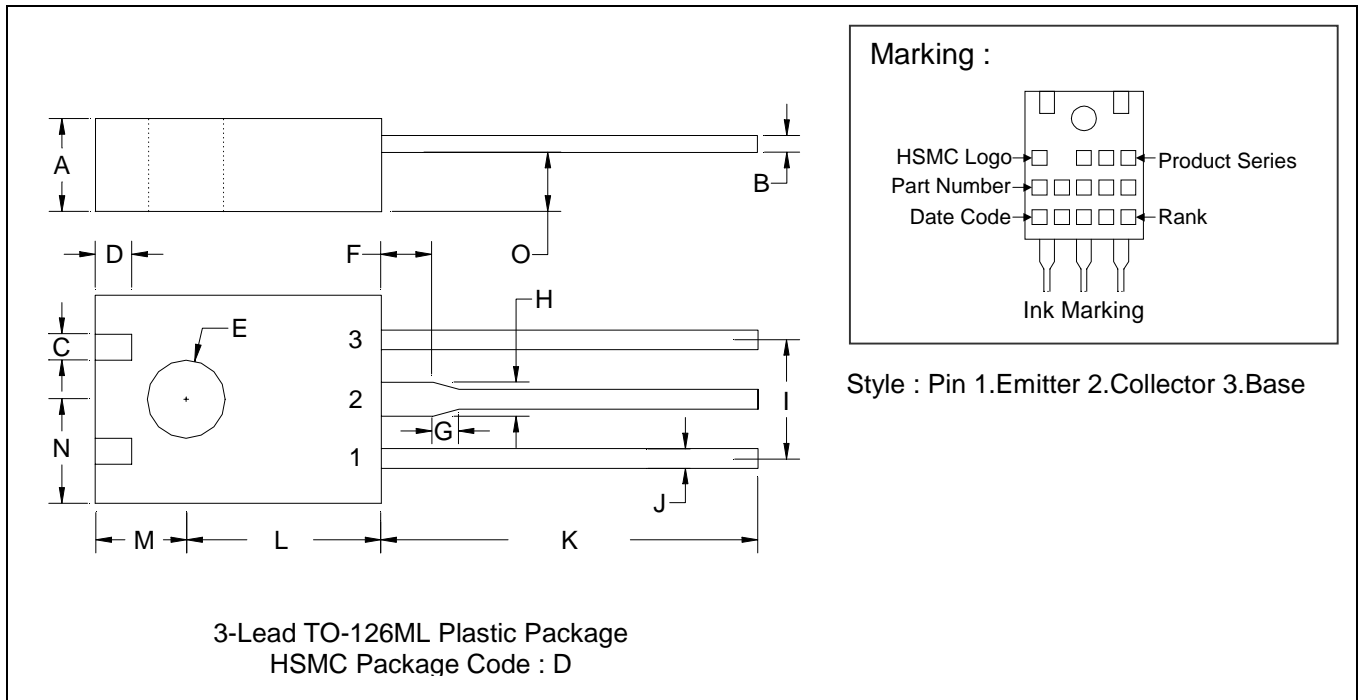


Characteristics Curve





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

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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