



HSA1538S

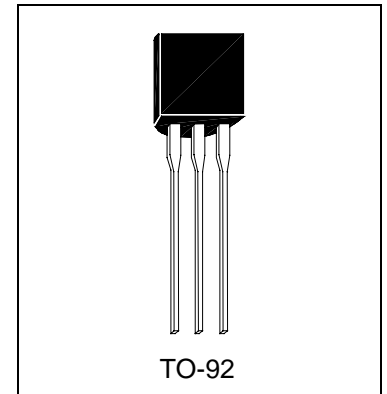
PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HSA1538S is designed for use in high-definition CRT display video output, wide-band amplifier applications..

Absolute Maximum Ratings

- Maximum Temperatures
 - Storage Temperature -55 ~ +150 °C
 - Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Ta=25°C) 900 mW
- Maximum Voltages and Currents (Ta=25°C)
 - VCBO Collector to Base Voltage -120 V
 - VCEO Collector to Emitter Voltage -120 V
 - VEBO Emitter to Base Voltage -3 V
 - IC Collector Current -200 mA
 - Icp Peak Collector Current -400 mA



Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-120	-	-	V	IC=-10uA, IE=0
BVCEO	-120	-	-	V	IC=-1mA, IB=0
BVEBO	-3	-	-	V	IE=-100uA, IC=0
ICBO	-	-	-0.1	uA	VCB=-80V, IE=0
IEBO	-	-	-0.1	uA	VEB=-2V, IC=0
*VCE(sat)	-	-	-1	V	IC=-30mA, IB=-3mA
*VBE(sat)	-	-	-1	V	IC=-30mA, IB=-3mA
*hFE1	60	160	320		VCE=-10V, IC=-10mA
*hFE2	40	-	-		VCE=-10V, IC=-100mA
fT	-	400	-	MHz	VCE=-10V, IC=-50mA
Cob	-	2.8	-	pF	VCB=-30V, f=1MHz

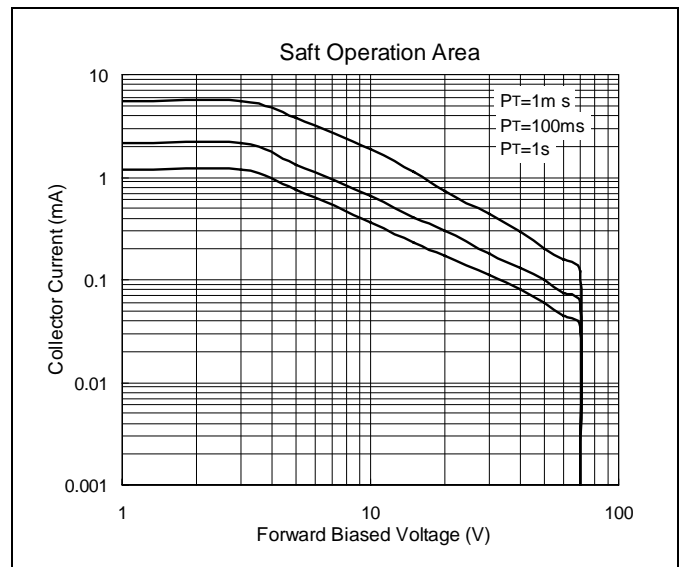
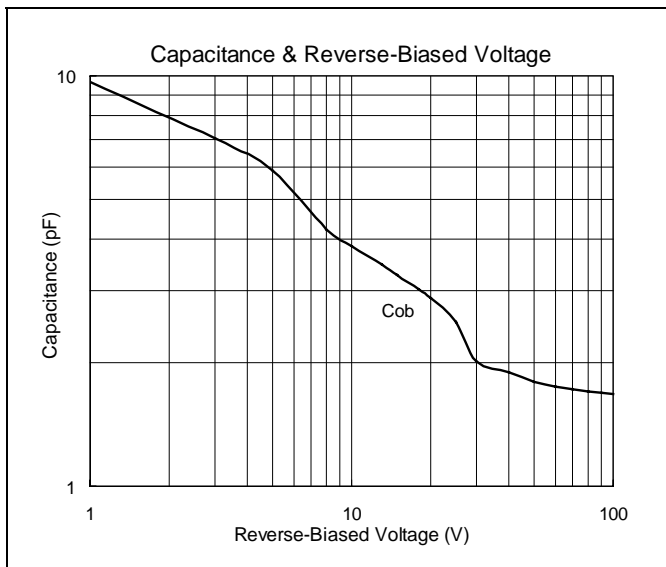
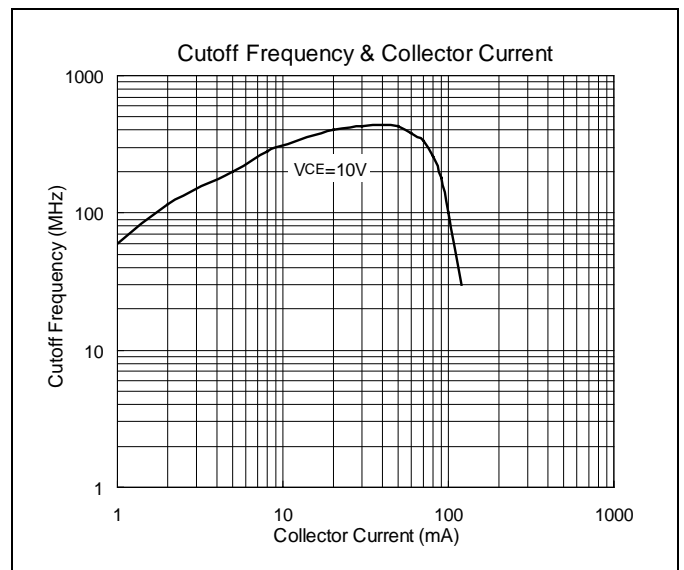
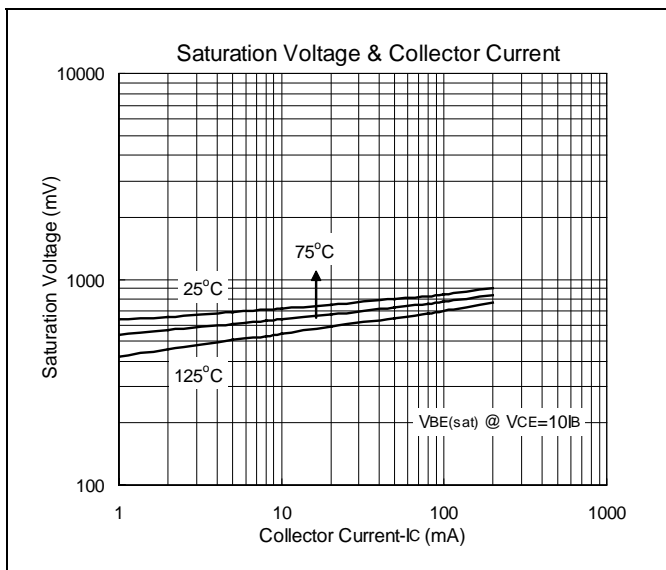
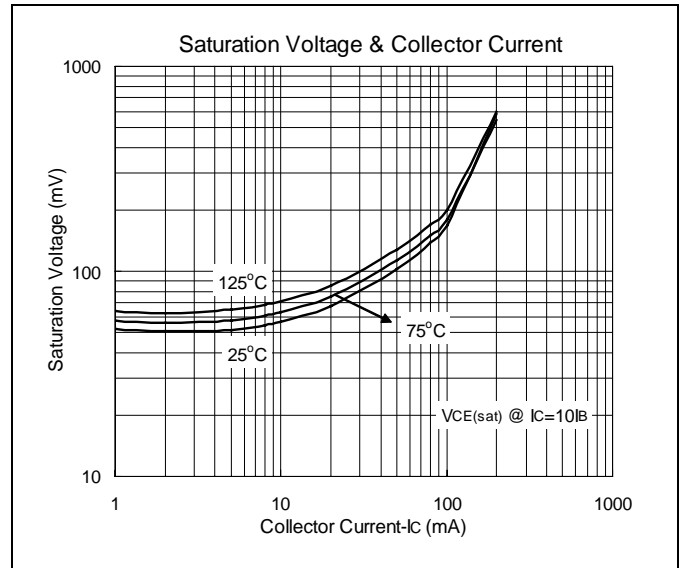
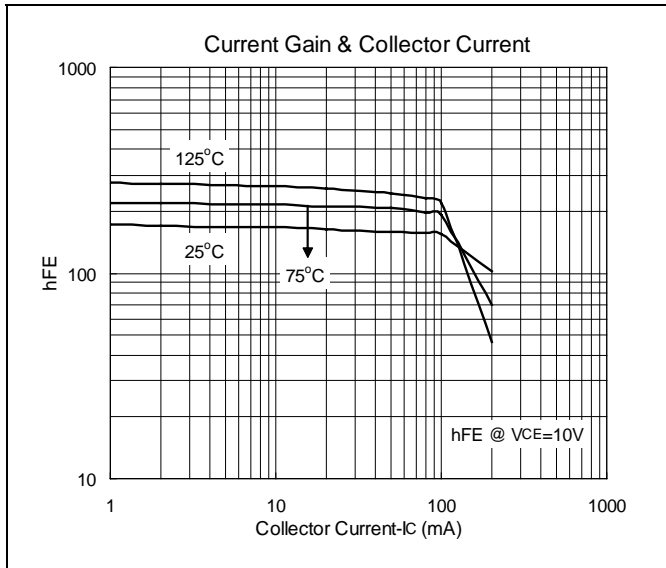
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

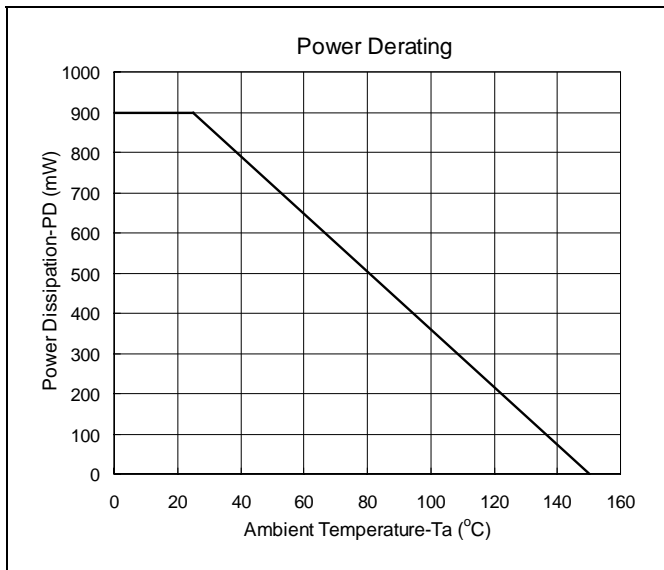
Classification Of hFE1

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



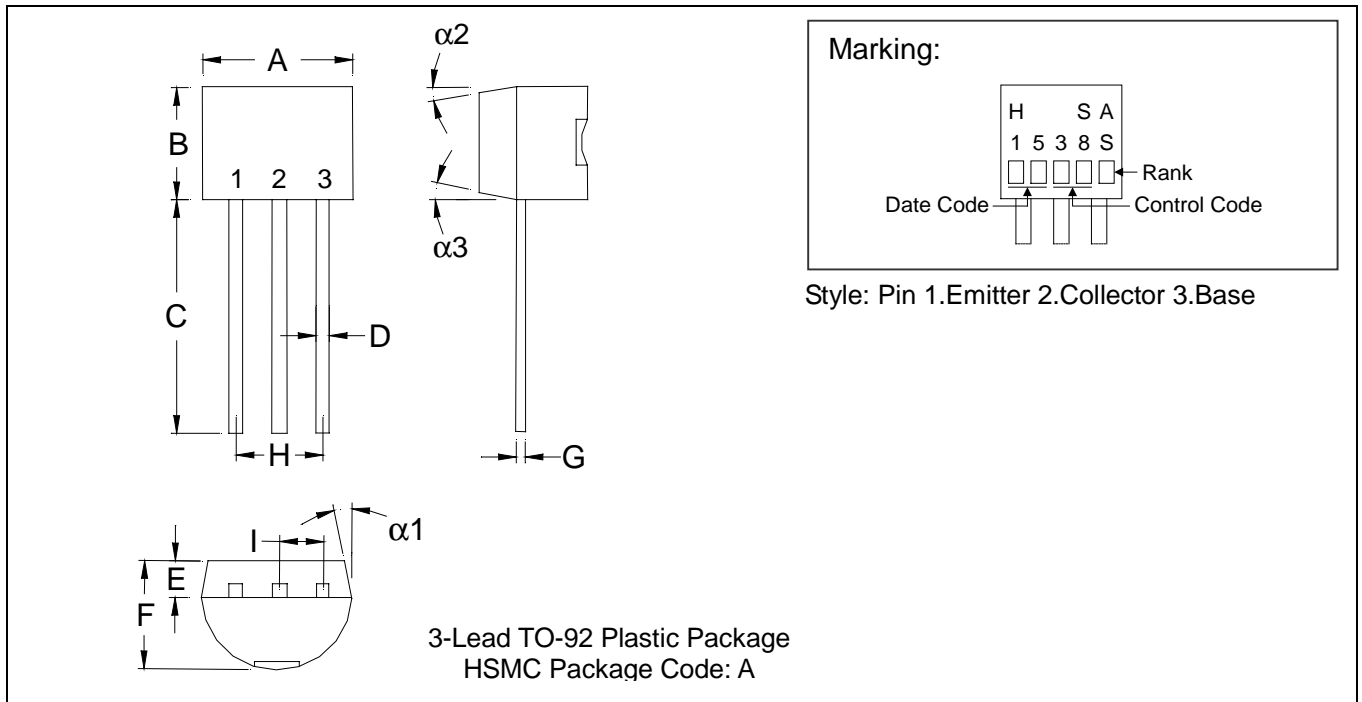
Characteristics Curve







TO-92 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°

- Notes:**
1. Dimension and tolerance based on our Spec. dated Apr. 25, 1996.
 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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