



HMPSA93

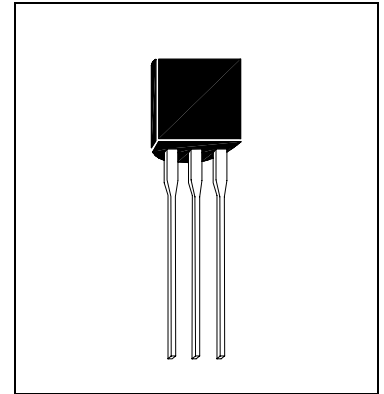
PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HMPSA93 is designed for application as a video output to drive color CRT, or as a dialer circuit in electronics telephone.

Features

- High Collector-Emitter Breakdown Voltage
- Low Collector-Emitter Saturation Voltage
- For Complementary Use with NPN Type HMPSA43



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C)..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage -200 V
VCEO Collector to Emitter Voltage..... -200 V
VEBO Emitter to Base Voltage -5 V
IC Collector Current -500 mA

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-200	-	-	V	IC=-100uA, IE=0
BVCEO	-200	-	-	V	IC=-1mA, IB=0
BVEBO	-5	-	-	V	IE=-10uA, IC=0
ICBO	-	-	-100	nA	VCB=-160V, IE=0
IEBO	-	-	-100	nA	VEB=-3V, IC=0
*VCE(sat)	-	-	-350	mV	IC=-20mA, IB=-2mA
*VBE(sat)	-	-	-900	mV	IC=-20mA, IB=-2mA
*hFE1	25	-	-		IC=-1mA, VCE=-10V
*hFE2	40	-	-		IC=-10mA, VCE=-10V
*hFE3	40	-	-		IC=-30mA, VCE=-10V
*hFE4	-	100	-		IC=-80mA, VCE=-10V
fT	50	-	-	MHz	IC=-10mA, VCE=-20V, f=100MHZ
Cob	-	-	8	pF	VCB=-20V, f=1MHz, IE=0

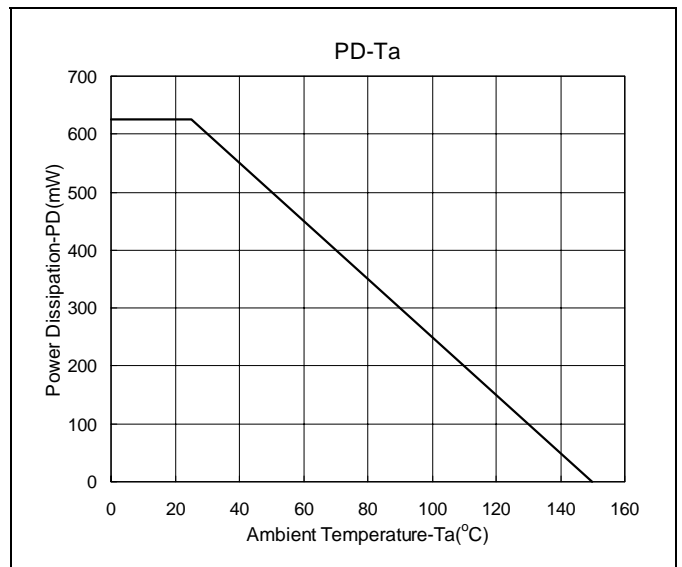
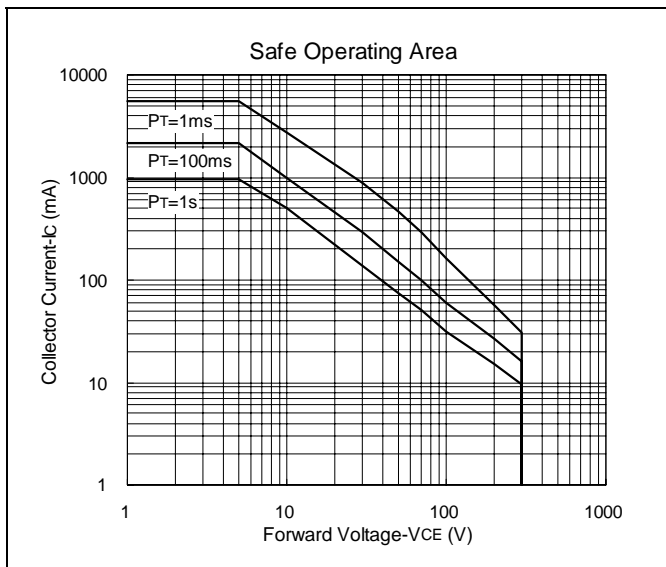
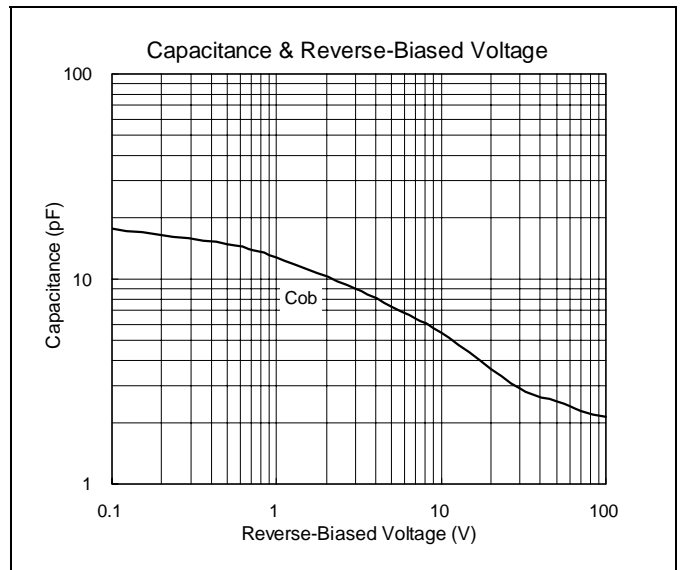
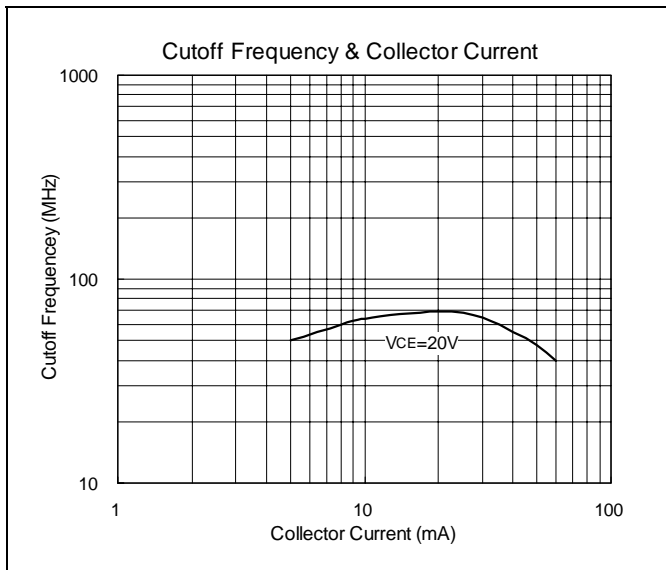
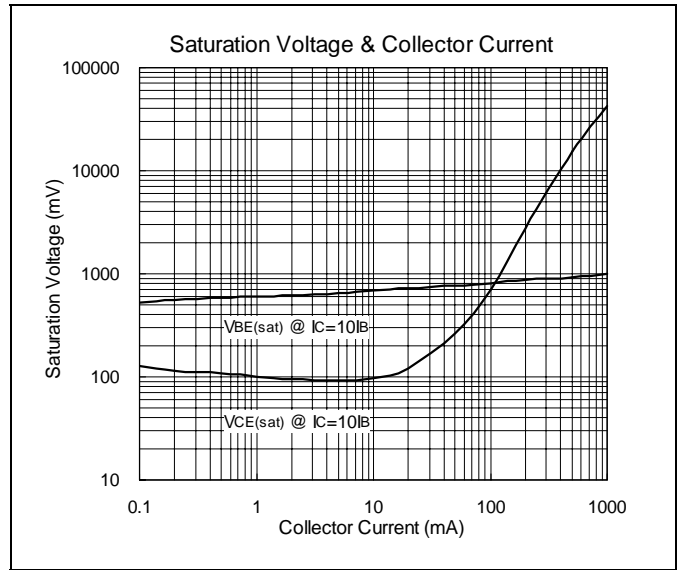
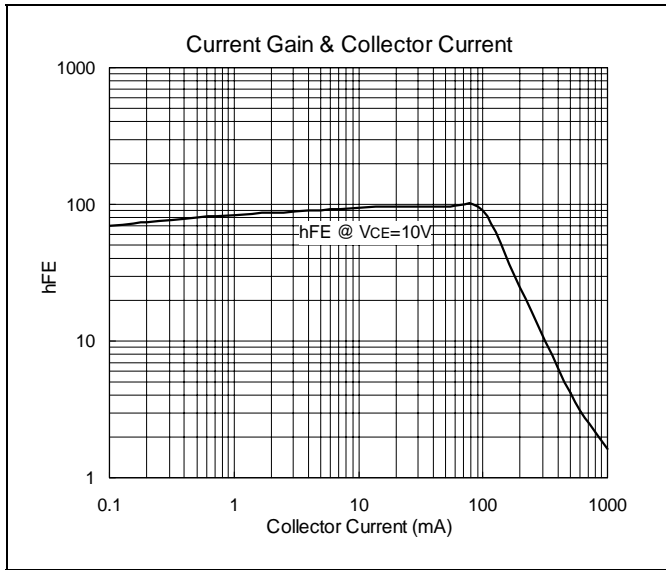
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE2 & VCE(sat)

Rank	hFE1	hFE2	hFE3	hFE4	VCE(sat)
NS	>60	>80	>80	>80	<200mV
N	>25	>40	>40	-	<350mV

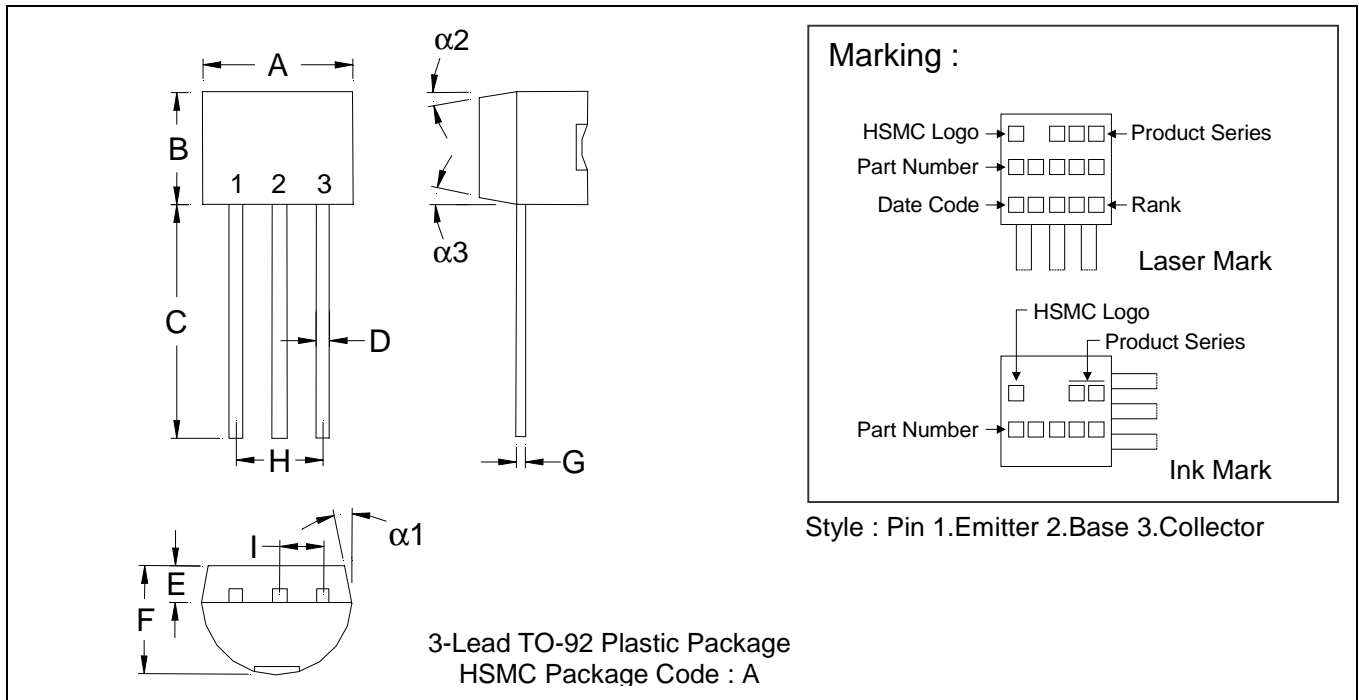


Characteristics Curve





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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