

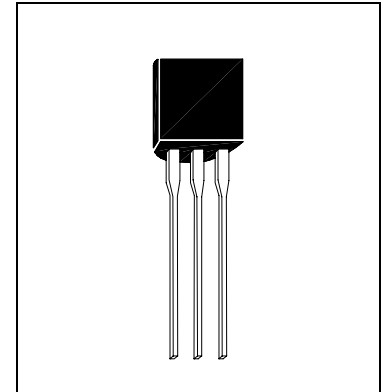


HMP5A42M

NPN EPITACIAL PLANAR TRANSISTOR

Description

The HMP5A42M is designed for application as a video output to drive color CRT, or as a dialer circuit in electronics telephone.



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 300 V
 VCEO Collector to Emitter Voltage 300 V
 VEBO Emitter to Base Voltage 6 V
 IC Collector Current 800 mA

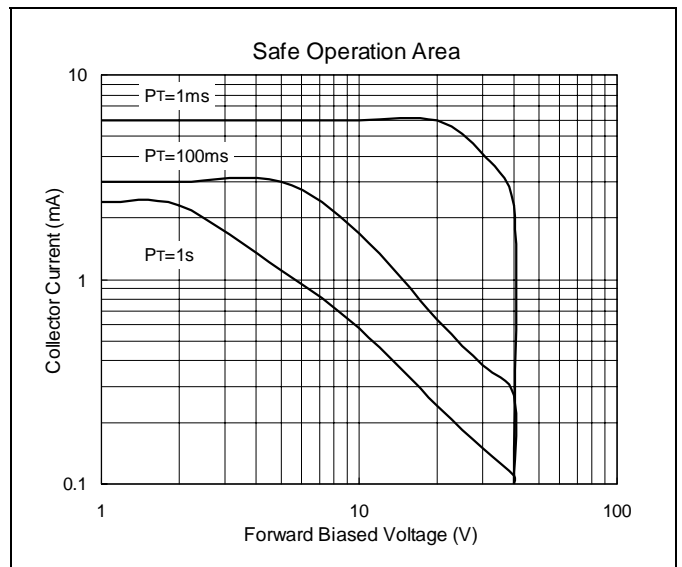
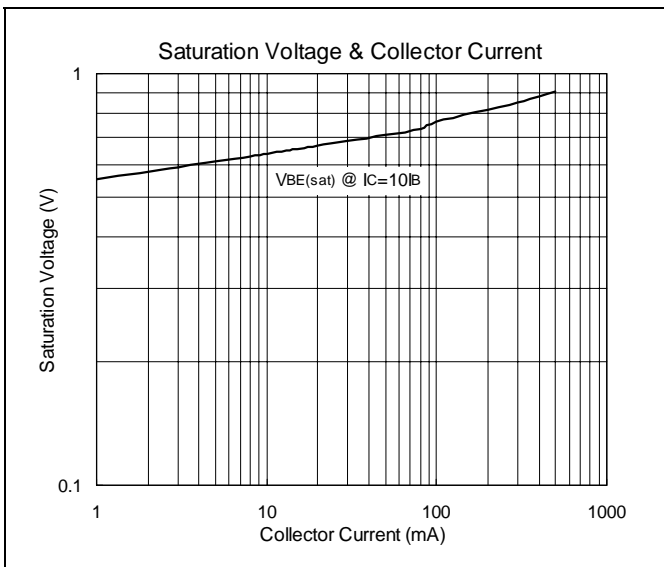
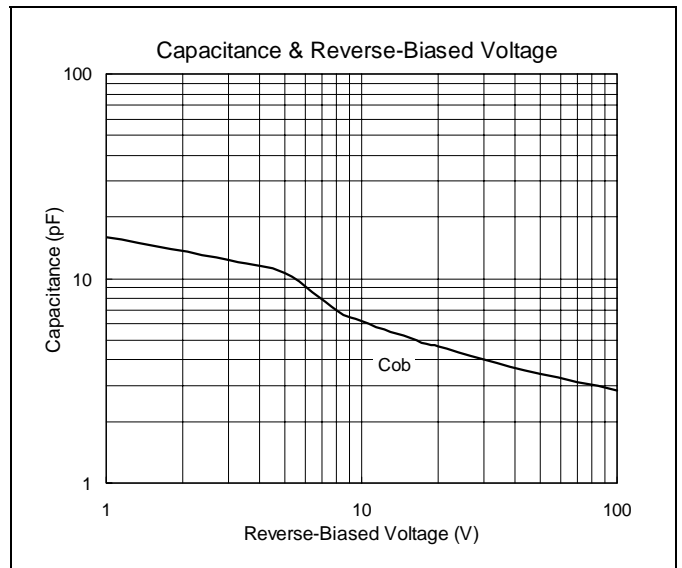
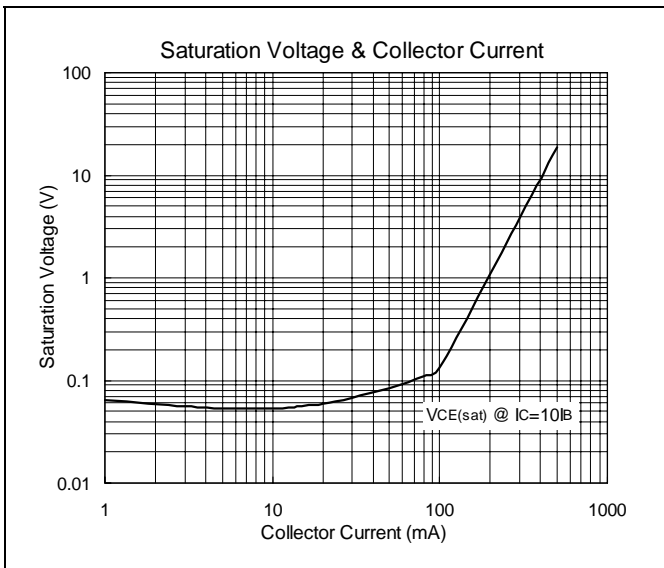
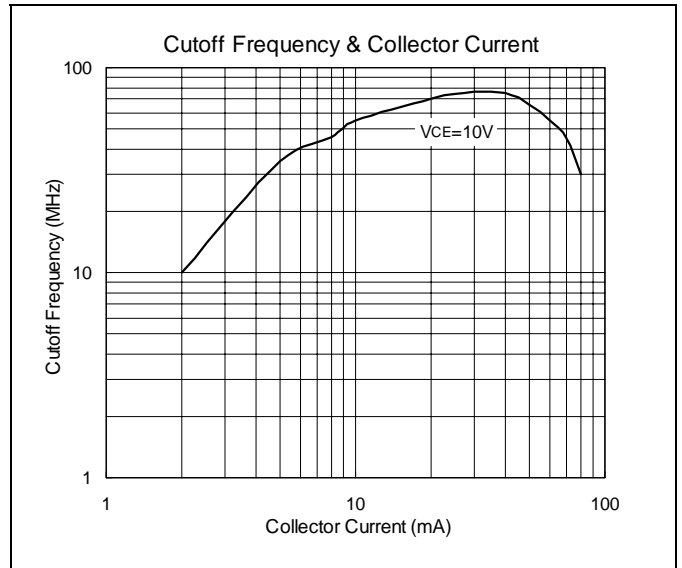
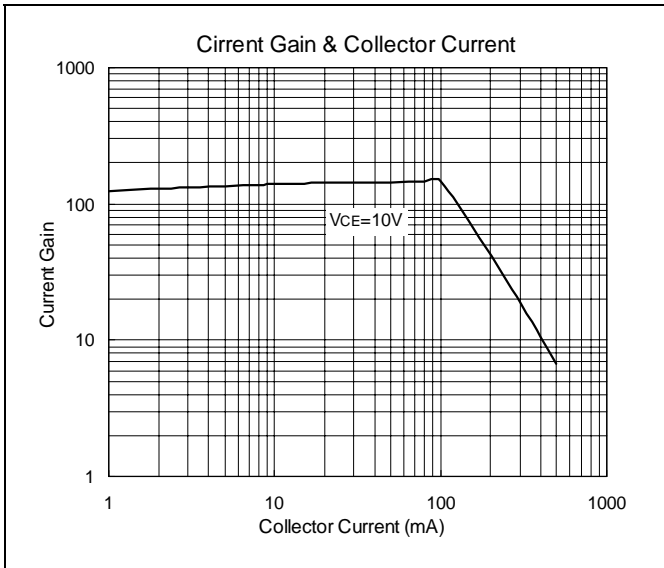
Characteristics (Ta=25°C)

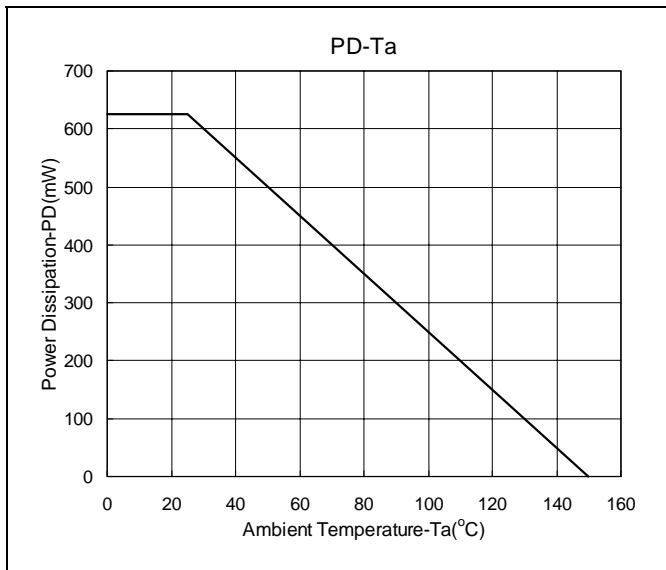
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	300	-	-	V	IC=100uA, IE=0
BVCEO	300	-	-	V	IC=1mA, IB=0
BVEBO	6	-	-	V	IE=10uA, IC=0
IEBO	-	-	100	nA	VEB=3V, IC=0
*VCE(sat)1	-	-	200	mV	IC=20mA, IB=2mA
*VCE(sat)2	-	-	750	mV	IC=100mA, IB=10mA
*VBE(sat)1	-	-	900	mV	IC=20mA, IB=2mA
*VBE(sat)2	-	-	1000	mV	IC=100mA, IB=10mA
*hFE1	80	-	-		IC=10mA, VCE=10V
*hFE2	80	-	-		IC=100mA, VCE=10V
*hFE3	40	-	-		IC=200mA, VCE=10V
fT	50	-	-	MHz	IC=10mA, VCE=20V, f=100MHZ

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



Characteristics Curve







TO-92 Dimension

3-Lead TO-92 Plastic Package
HSMC Package Code : A

Marking :

HSMC Logo → □ □ □ □ ← Product Series
 Part Number → □ □ □ □ □ □
 Date Code → □ □ □ □ □ □ ← Rank
 Laser Mark

HSMC Logo
 Product Series
 Part Number → □ □ □ □ □ □
 Ink Mark

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

*: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	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*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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