

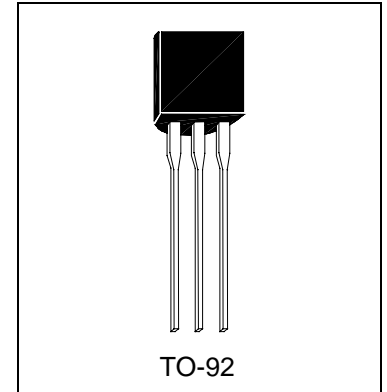


HSD965

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSD965 is suited for use as AF output amplifier and flash unit.



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature 150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 750 mW
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage 40 V
VCEO Collector to Emitter Voltage 20 V
VEBO Emitter to Base Voltage 7 V
IC Collector Current (Continuous) 5 A
IC Collector Current (Peak PT=10mS) 8 A

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA, IE=0
BVCEO	20	-	-	V	IC=1mA, IB=0
BVEBO	7	-	-	V	IE=10uA, IC=0
ICBO	-	-	0.1	uA	VCB=10V, IE=0
IEBO	-	-	0.1	uA	VEB=7V, IC=0
*VCE(sat)	-	0.35	1	V	IC=3A, IB=100mA
*hFE1	230	-	800		VCE=2V, IC=0.5A
*hFE2	150	-	-		VCE=2V, IC=2A
fT	-	150	-	MHz	VCE=6V, IE=50mA
Cob	-	-	50	pF	VCB=20V, f=1MHz, IE=0

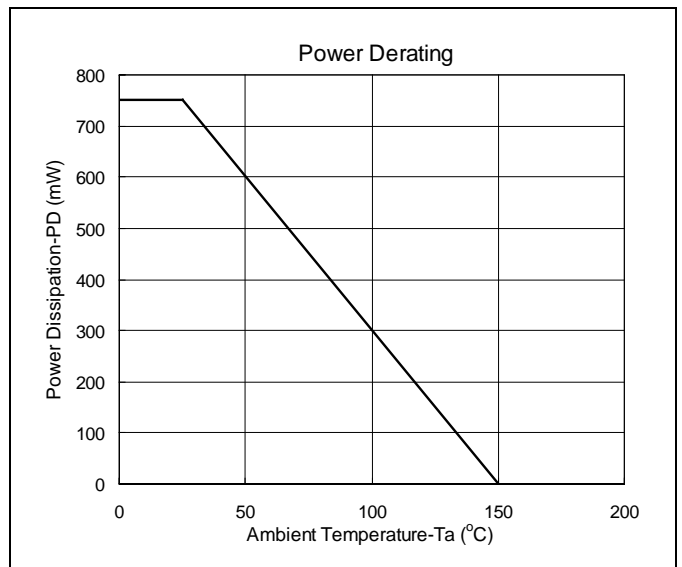
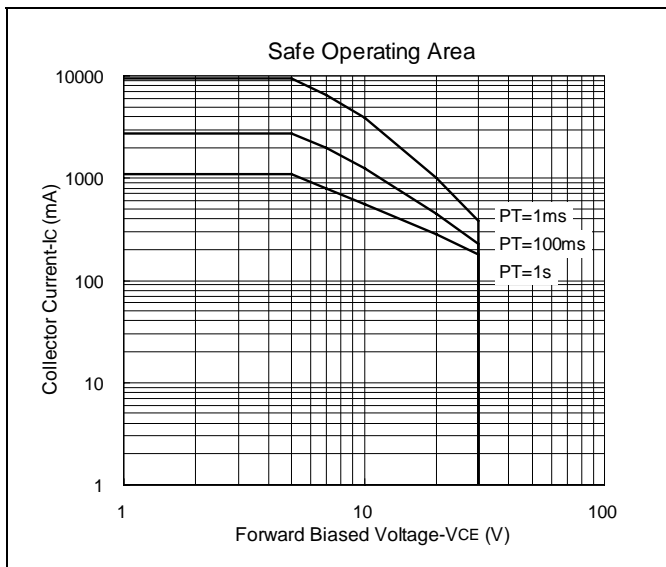
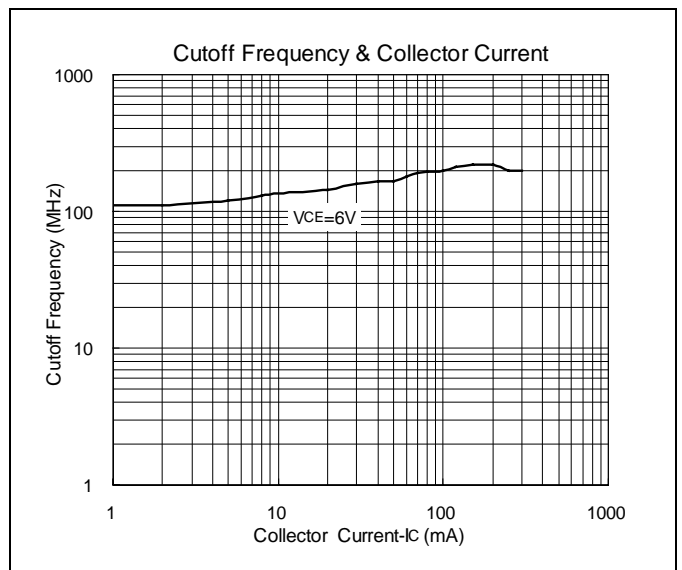
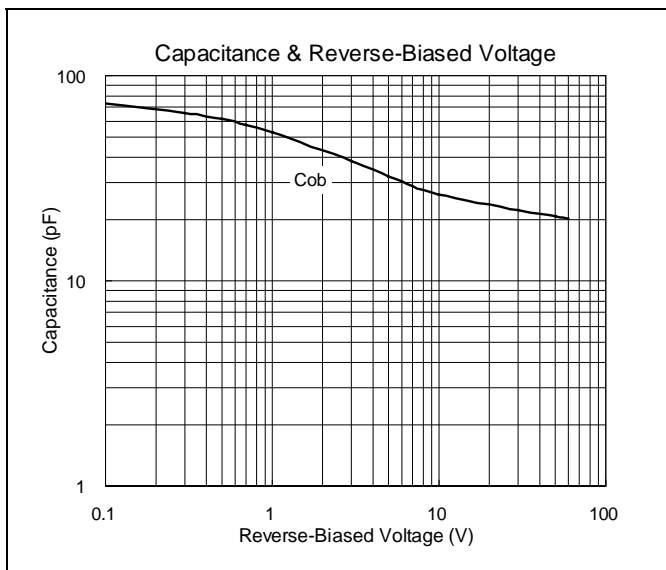
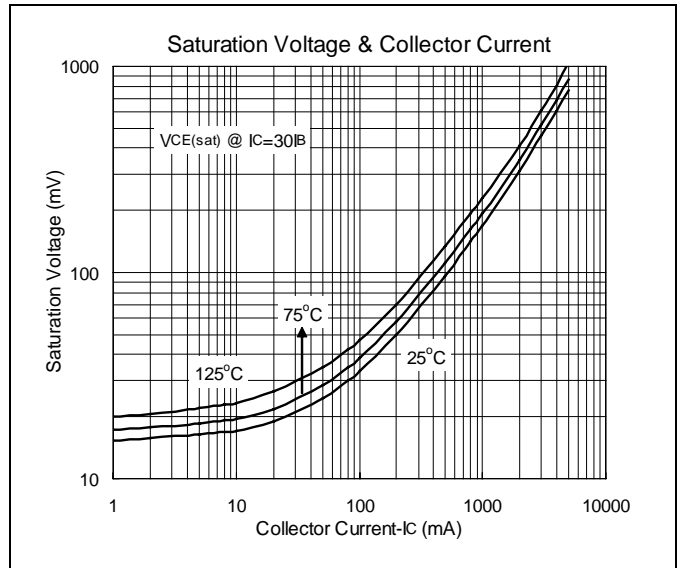
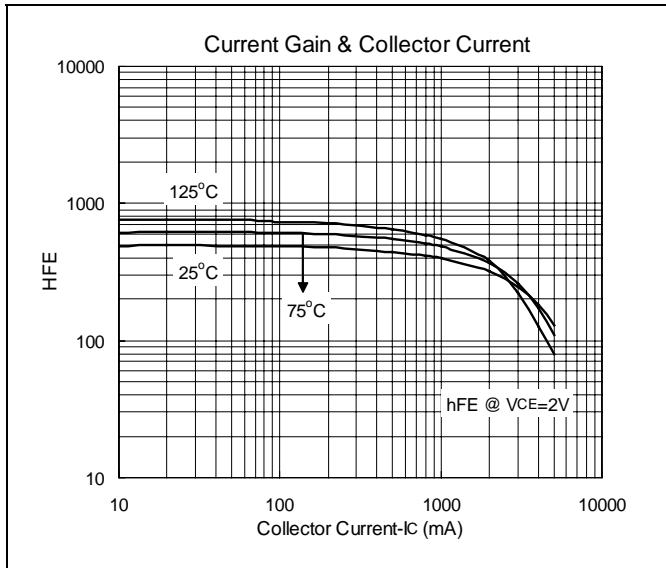
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE

Rank	Q	R	S
Range	230-380	340-600	560-800

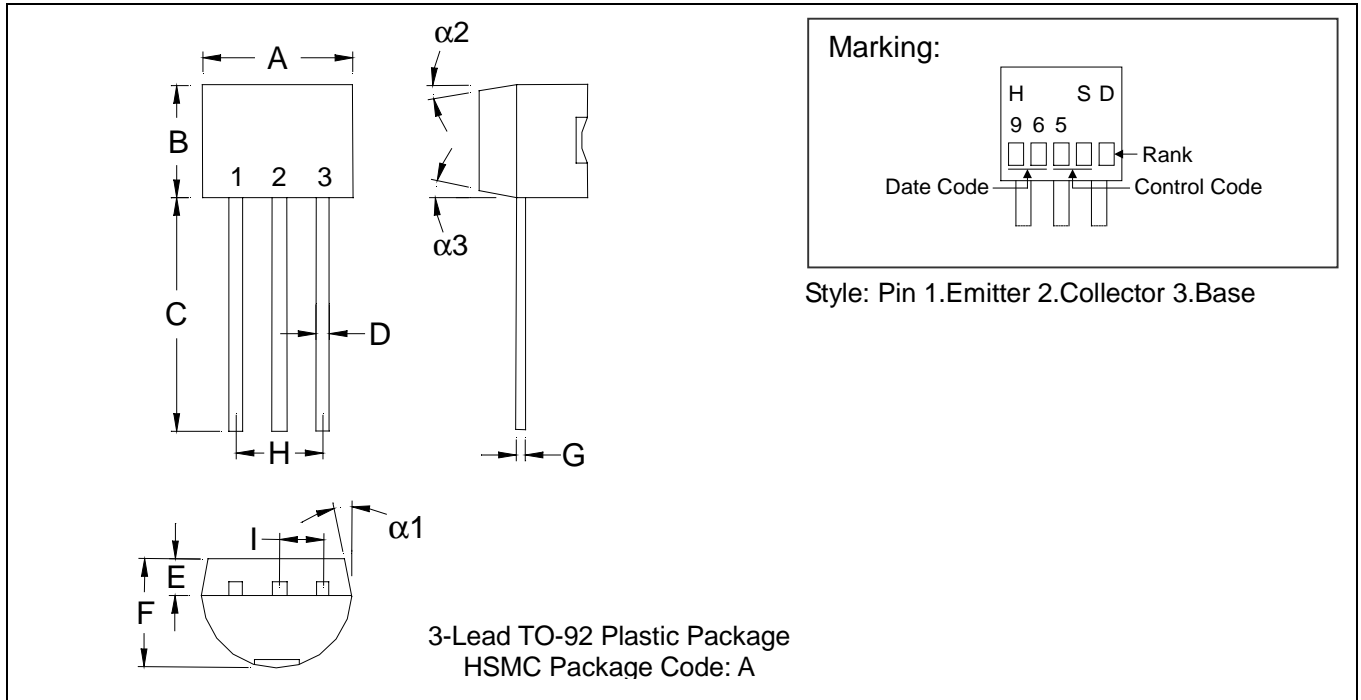


Characteristics Curve





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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