

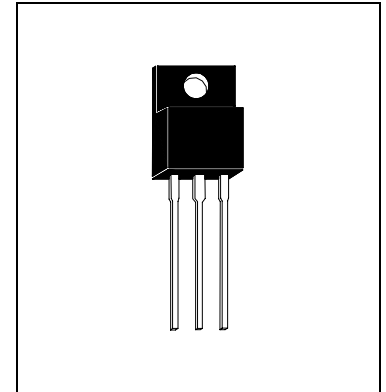


HSCF4242

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSCF4242 is designed for triple diffused planar type and high speed switching applications.



Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
 - Storage Temperature -50~+150°C
 - Junction Temperature +150°C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Tc=25°C) 30W
- Maximum Voltages and Currents
 - BVCBO Collector to Base Voltage 450 V
 - BVCEO Collector to Emitter Voltage 400 V
 - BVEBO Emitter to Base Voltage 10 V
 - IC Collector Current 7 A
 - IB Base Current 2 A

Characteristics (Ta=25°C)

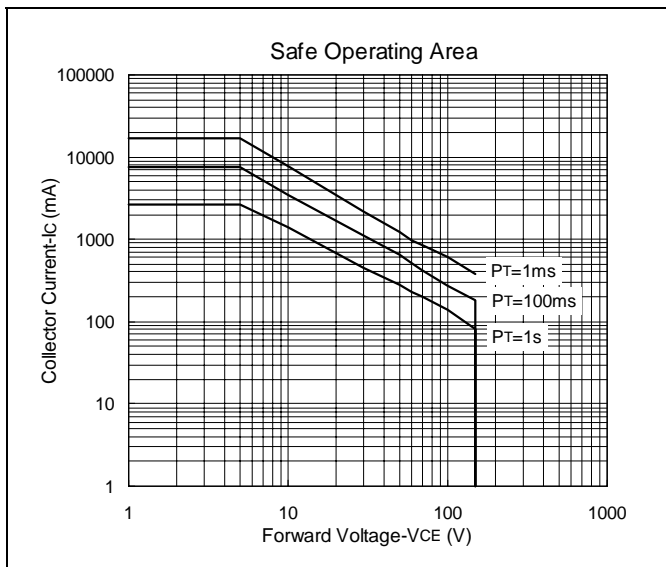
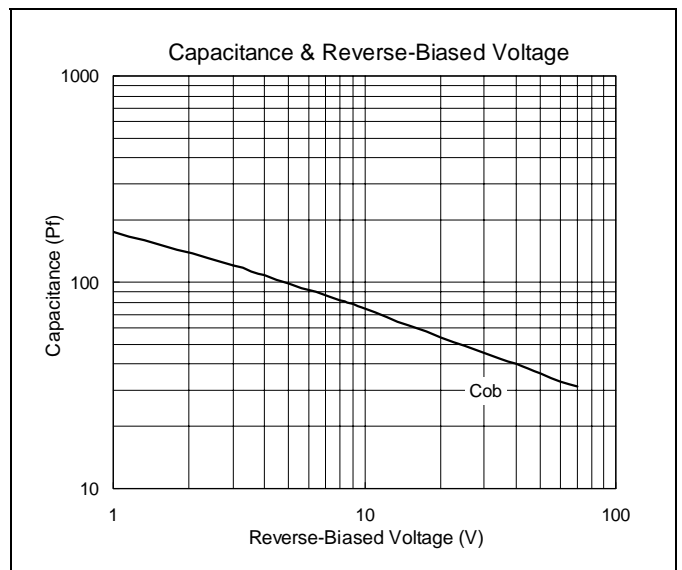
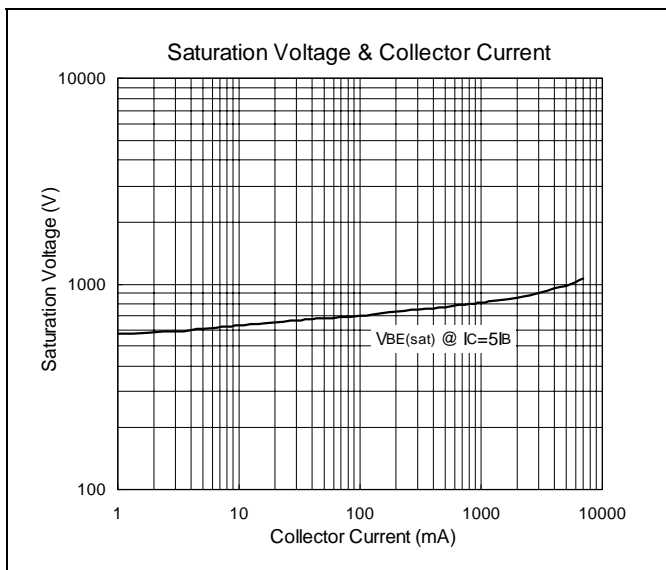
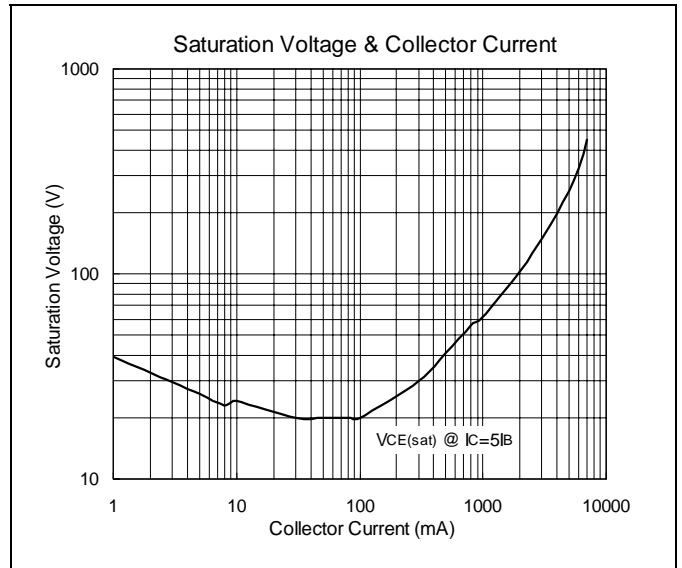
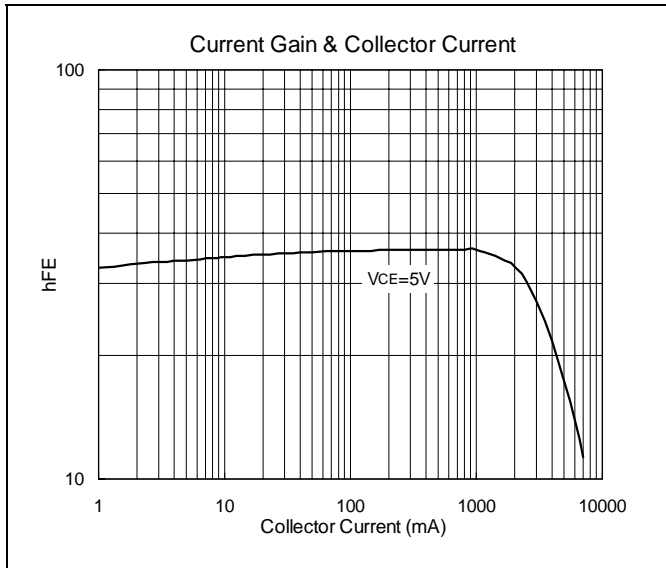
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	450	-	-	V	IC=1mA
BVCEO	400	-	-	V	IC=100mA
BVEBO	10	-	-	V	IE=1mA
ICBO	-	-	100	uA	VCB=450V
IEBO	-	-	100	uA	VEB=10V
VCE(sat)	-	-	0.8	V	IC=4A, IB=0.8A
VBE(sat)	-	-	1.2	V	IC=4A, IB=0.8A
hFE1	15	-	55		IC=0.8A, VCE=5V
hFE2	10	-	-		IC=2A, VCE=5V
hFE3	10	-	-		IC=4A, VCE=5V

Classification Of hFE1

Rank	A	B1	B2	B3	B4
Range	15-28	22-35	29-42	36-49	43-55

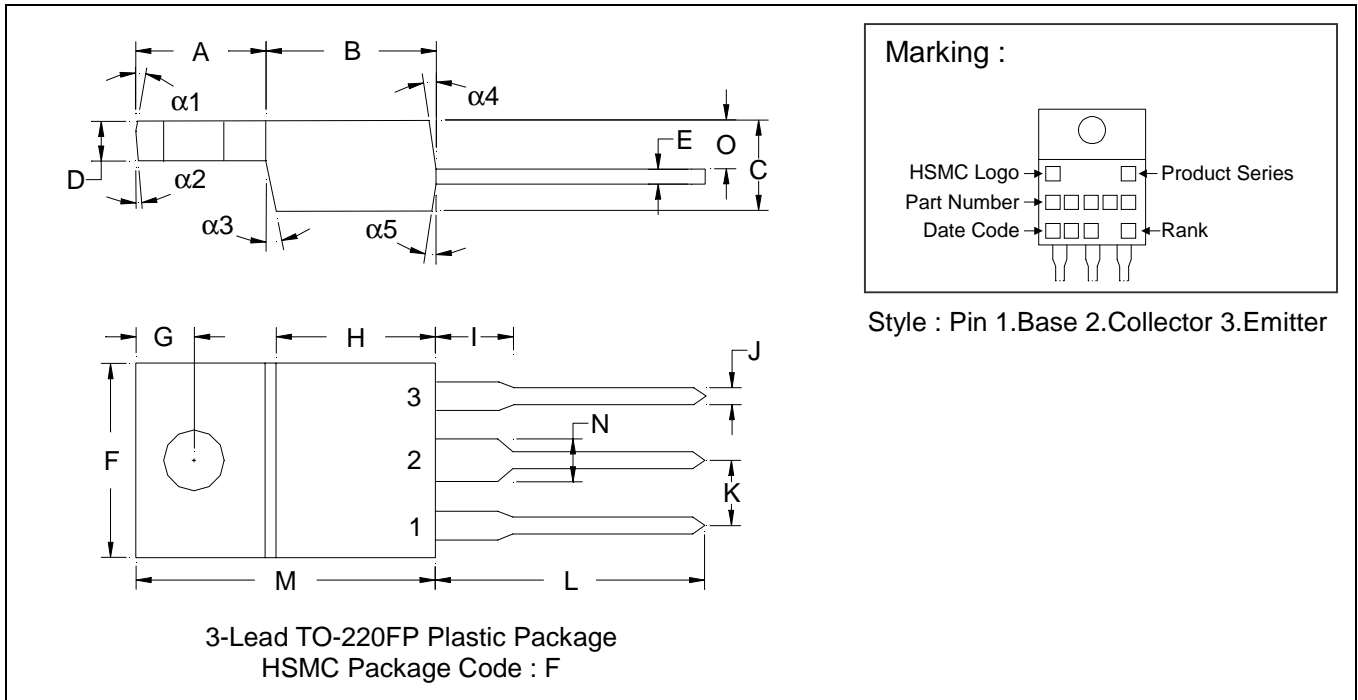


Characteristics Curve





TO-220FP Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.2480	0.2520	6.30	6.40	K	-	*0.1004	-	*2.55
B	0.3386	0.3425	8.60	8.70	L	0.5118	0.5906	13.00	15.00
C	0.1673	0.1870	4.25	4.75	M	0.5886	0.5925	14.95	15.05
D	0.1043	0.1083	2.65	2.75	N	-	*0.0669	-	*1.70
E	0.0230	0.0242	0.58	0.61	O	0.1098	0.1114	2.79	2.83
F	0.3980	0.4039	10.11	10.26	1	-	-2°	-	*2°
G	0.1083	0.1122	2.75	2.85	2	-	*5°	-	*5°
H	0.3386	0.3425	8.60	8.70	3	-	*15°	-	*15°
I	-	*0.1496	-	*3.80	4	-	*5°	-	*5°
J	-	*0.0236	-	*0.60	5	-	*5°	-	*5°

Notes : 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.
 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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