

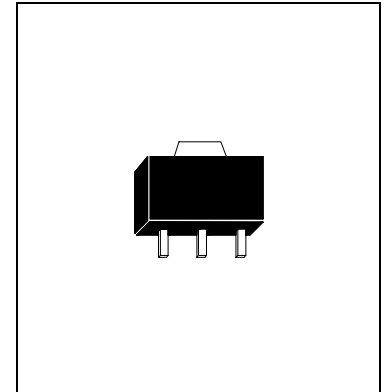


HM3019

NPN EPITAXIAL PLANAR TRANSISTOR

Description

This device is designed for use as general purpose amplifier and switching requiring collector currents 1A



Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 1.2 W
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage 140 V
 VCEO Collector to Emitter Voltage 80 V
 VEBO Emitter to Base Voltage 7 V
 IC Collector Current 1 A

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	140	-	-	V	IC=100uA
BVCEO	80	-	-	V	IC=30mA
BVEBO	7	-	-	V	IE=100uA
ICBO	-	-	50	nA	VCB=90V
IEBO	-	-	50	nA	VEB=5V
*VCE(sat)	-	-	0.2	V	IC=150mA, IB=15mA
*VBE(sat)	-	-	1.1	V	IC=150mA, IB=15mA
*hFE1	50	-	-		IC=0.1mA, VCE=10V
*hFE2	90	-	-		IC=10mA, VCE=10V
*hFE3	100	-	300		IC=150mA, VCE=10V
*hFE4	50	-	-		IC=500mA, VCE=10V
*hFE5	15	-	-		IC=1000mA, VCE=10V
fT	100	-	-	MHz	IC=50mA, VCE=10V, f=100MHz
Cob	-	-	12	pF	VCE=10V, f=1MHz, IE=0

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



SOT-89 Dimension

Marking :

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

3-Lead SOT-89 Plastic Surface Mounted Package
 HSMC Package Code : M

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.52
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.0141	0.0201	0.36	0.51					

Notes : 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
 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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