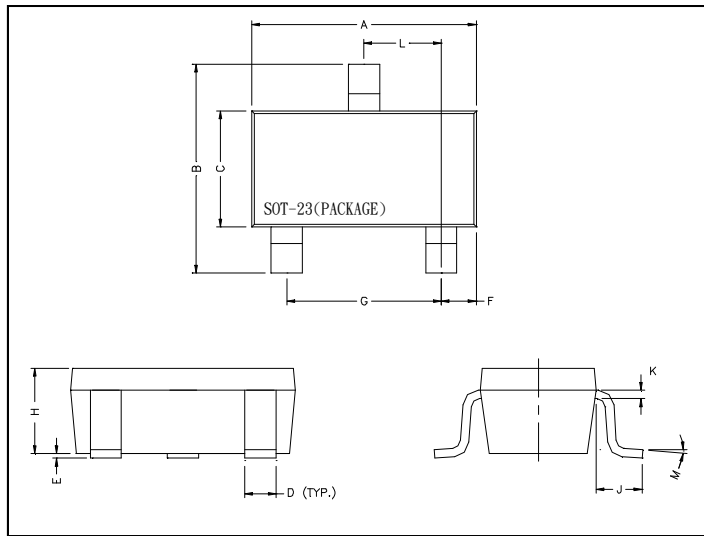


GMBT3838**NPN EPITAXIAL PLANAR TRANSISTOR****Description**

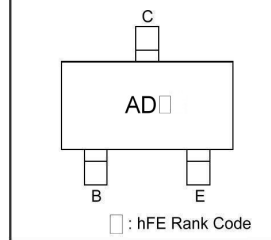
The GMBT3838 is designed for high frequency amplifier transistor.

Features

- High transition frequency
- Small $r_{bb'}$ -Cc and high gain
- Small NF

Package Dimensions

Marking:



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	1.90	REF.
B	2.40	2.80	H	1.00	1.30
C	1.40	1.60	K	0.10	0.20
D	0.35	0.50	J	0.40	-
E	0	0.10	L	0.85	1.15
F	0.45	0.55	M	0°	10°

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	°C
Storage Temperature	Tstg	-55~+150	°C
Collector to Base Voltage	VCBO	20	V
Collector to Emitter Voltage	VCEO	11	V
Emitter to Base Voltage	VEBO	3	V
Collector Current	IC	50	mA
Total Power Dissipation	PD	200	mW

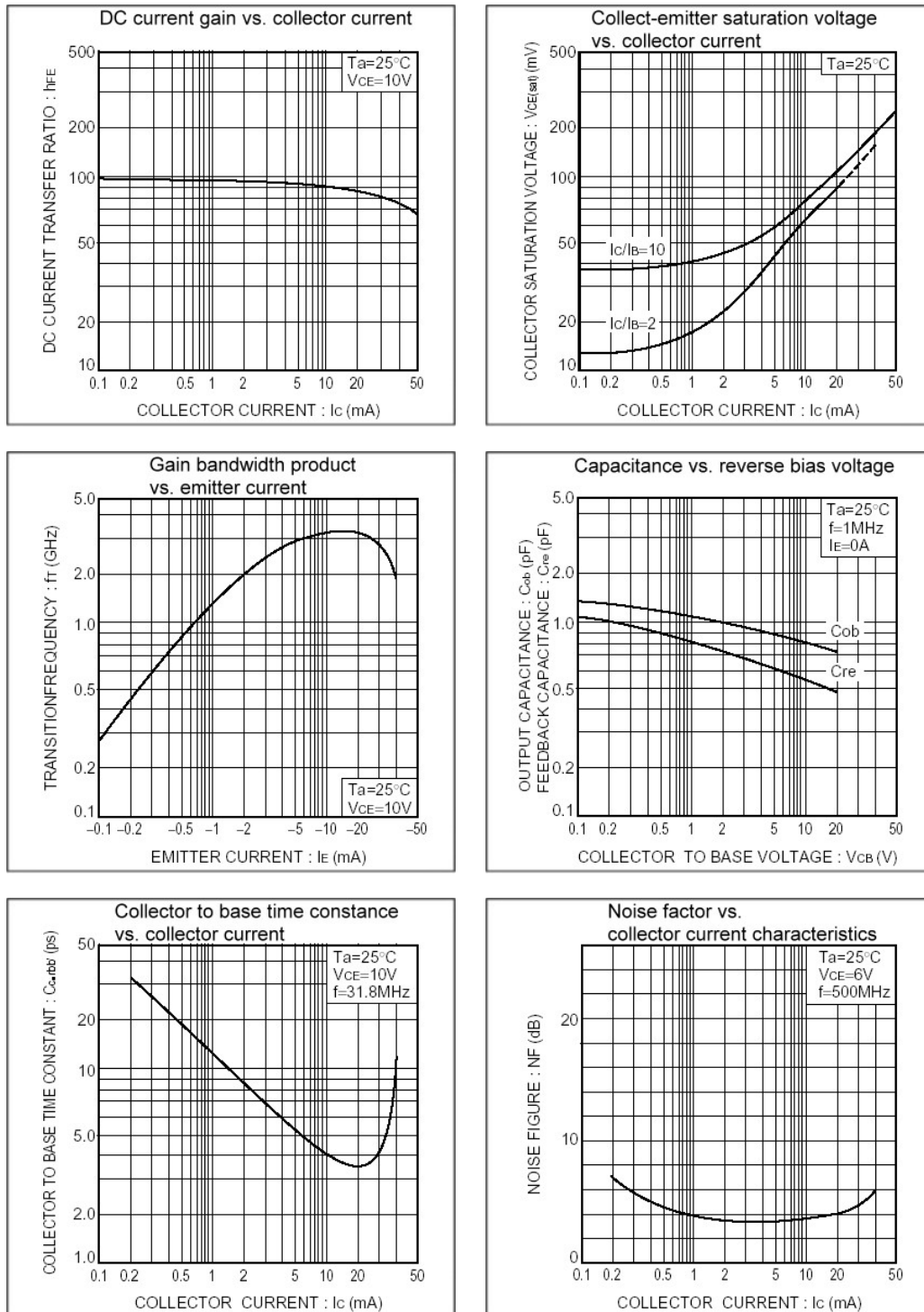
Electrical Characteristics(Ta = 25°C, unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	20	-	-	V	IC=10uA, IE=0
BVCEO	11	-	-	V	IC=1mA, IB=0
BVEBO	3	-	-	V	IE=10uA, IC=0
ICBO	-	-	500	nA	VCB=10V, IE=0
IEBO	-	-	500	nA	VEB=2V, IC=0
VCE(sat)	-	-	500	mV	IC=10mA, IB=5mA
hFE	56	-	400		VCE=10V, IC=5mA
fT	1.4	3.2	-	GHz	VCE=10V, IE=10mA, f=500MHz
Cob	-	0.8	1.5	pF	VCB=10V, f=1MHz
rbb-Cc	-	4	12	ps	VCB=10V, IC=10mA, f=31.8MHz
NF	-	3.5	-	dB	VCE=6V, IC=2mA, f=500MHz, Rg=50Ω

Classification Of hFE

Rank	A	B
Range	56 ~ 220	200 ~ 400

Characteristics Curve

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