

MMBTSC4226

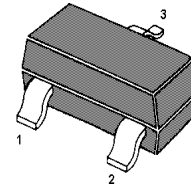
NPN Silicon Epitaxial Planar Transistor

High Frequency Low Noise Amplifier.

The transistor is subdivided into three groups, Q, R and S, according to its DC current gain.

Description:

The MMBTSC4226 is a low supply voltage transistor designed for VHF, UHF low noise amplifier.



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

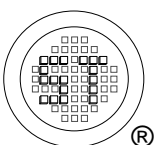
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	20	V
Collector Emitter Voltage	V_{CEO}	12	V
Emitter Base Voltage	V_{EBO}	3	V
Collector Current	I_C	100	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_{amb} = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 3\text{ V}$, $I_C = 7\text{ mA}$ Current Gain Group	Q				
	h_{FE}	40	-	80	-
	R	70	-	140	-
	S	125	-	250	-
Collector Cutoff Current at $V_{CB} = 10\text{ V}$	I_{CBO}	-	-	1	μA
Emitter Cutoff Current at $V_{EB} = 1\text{ V}$	I_{EBO}	-	-	1	μA
Gain Bandwidth Product at $V_{CE} = 3\text{ V}$, $I_C = 7\text{ mA}$	f_T	3	4.5	-	GHz
Feed back Capacitance ¹⁾ at $V_{CE} = 3\text{ V}$, $f = 1\text{ MHz}$	C_{re}	-	0.7	1.5	pF

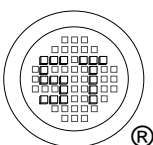
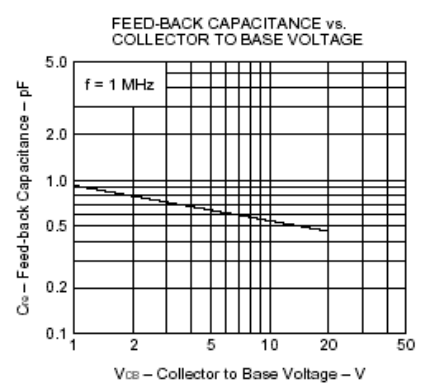
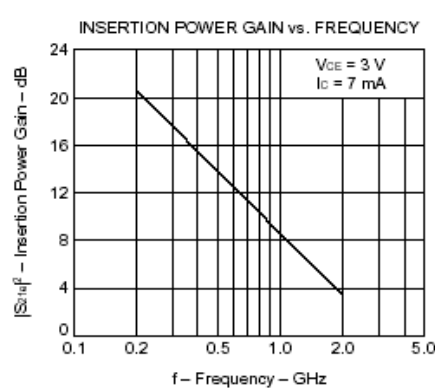
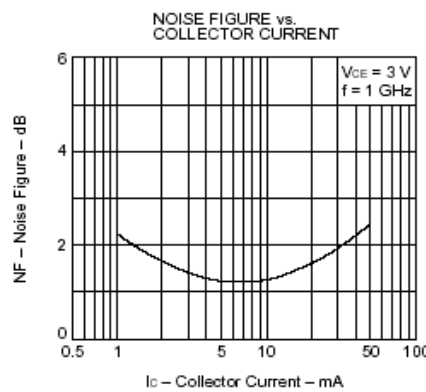
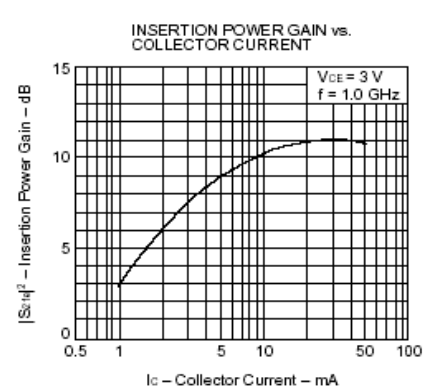
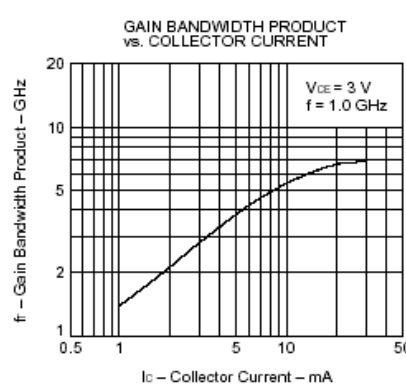
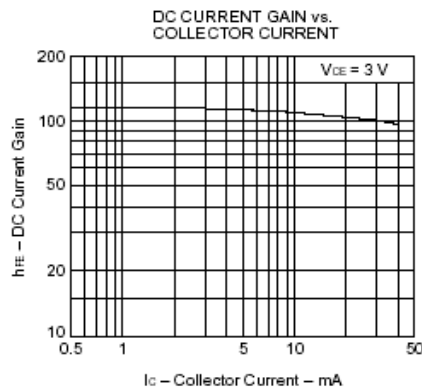
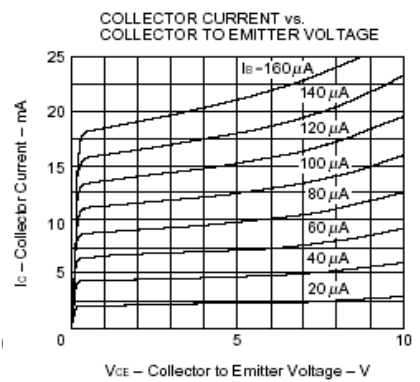
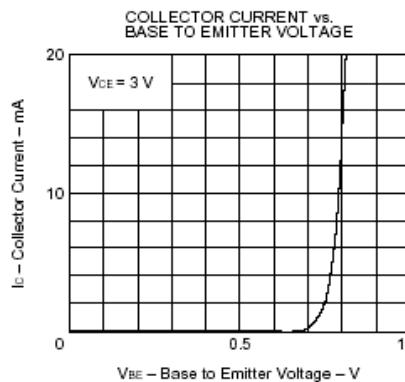
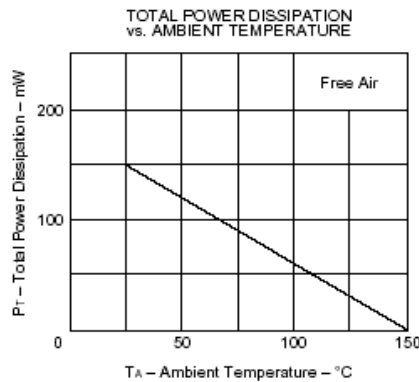
¹⁾ Measured with 3 terminal bridge, Emitter and case should be grounded.



SEMTECH ELECTRONICS LTD.



Dated: 16/03/2015 Rev: 01



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ISO/TS 16949:2009
Certificate No. 160713000



ISO14001:2004
Certificate No. 7116



ISO 9001:2008
Certificate No. 90719410



BS-OHSAS 18001:2007
Certificate No. 7116



IECQ QC 080000
Certificate No. PRC-18P4-1485-1

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