
2SC5390

Silicon NPN Epitaxial
High Frequency Amplifier

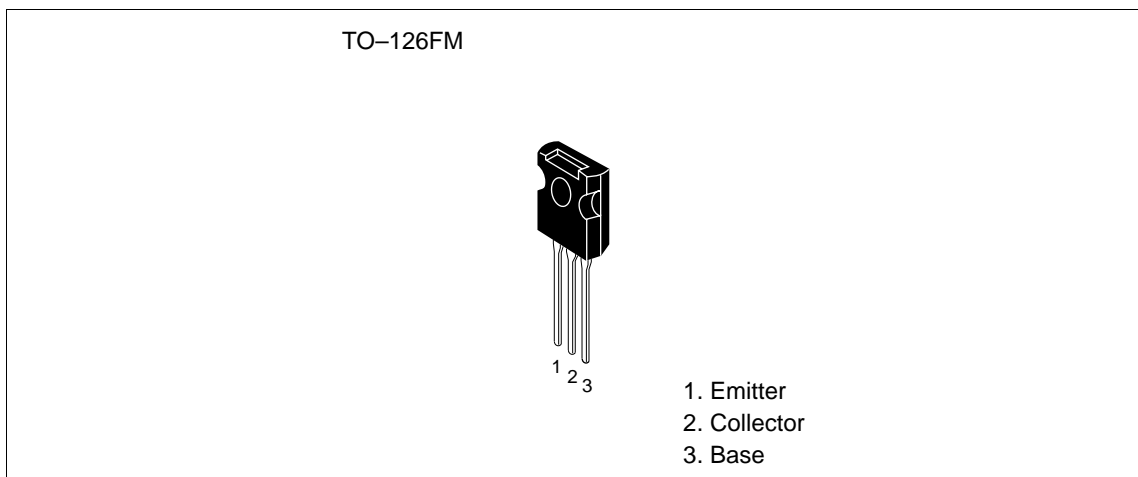
HITACHI

ADE-208-492 (Z)
1st. Edition
December, 1996

Features

- Excellent high frequency characteristics
 $f_T = 1.4\text{GHz}$ (typ.)
- Low output capacitance
 $C_{ob} = 2.4\text{ pF}$ (typ.)
- Isolated package
TO-126FM

Outline



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Absolute Maximum Ratings (Ta = 25°C)

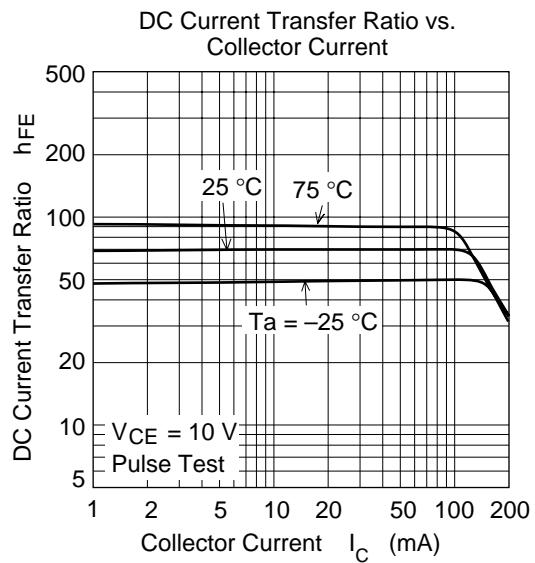
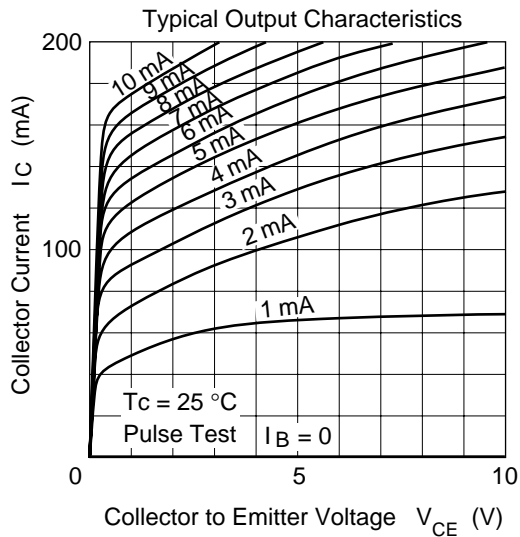
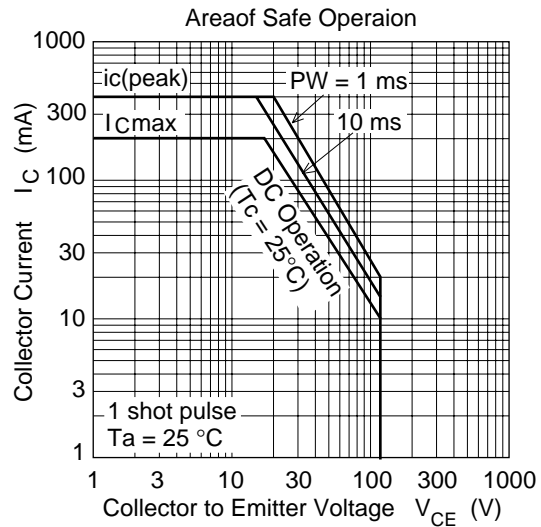
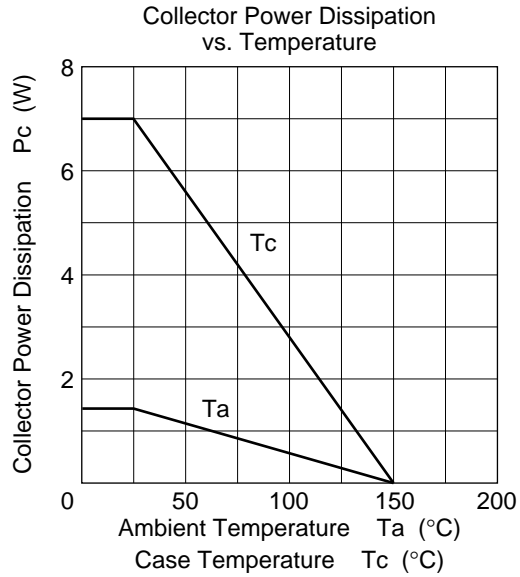
Item	Symbol	Ratings	Unit
Collector to base voltage	VCBO	110	V
Collector to emitter voltage	VCEO	110	V
Emitter to base voltage	VEBO	3	V
Collector current	IC	200	mA
Collector peak current	ic(peak)	400	mA
Collector power dissipation	PC	1.4	W
Collector power dissipation	PC*1	7	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. Value at Tc = 25°C

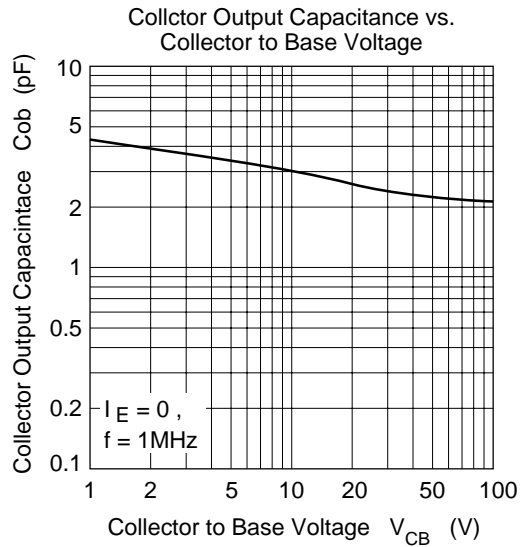
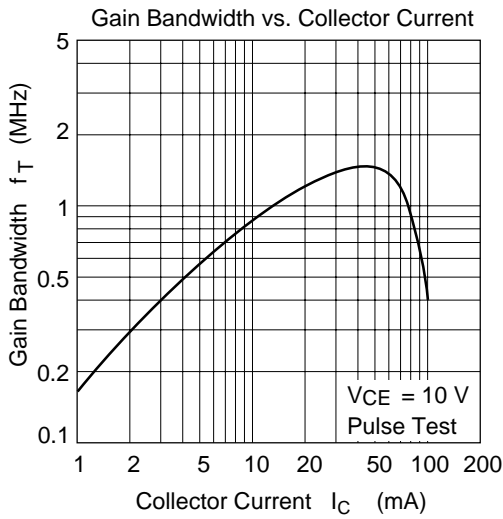
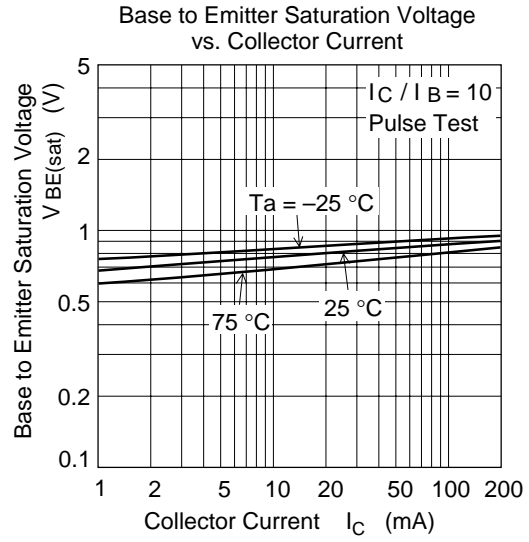
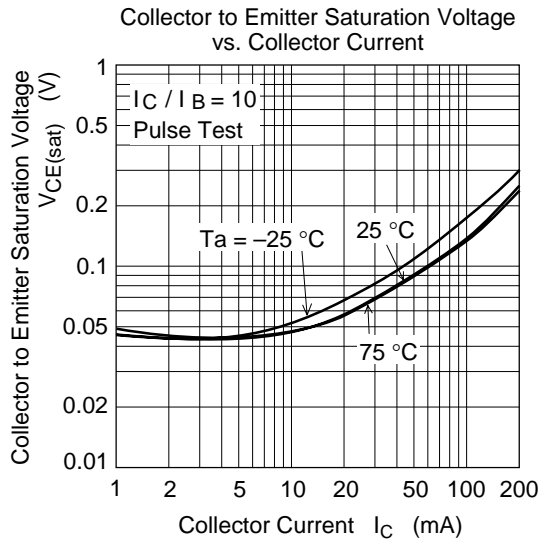
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to base breakdown voltage	V(BR)CBO	110	—	—	V	IC = 10 ⁻⁶ A, IE = 0
Collector to emitter breakdown voltage	V(BR)CEO	110	—	—	V	IC = 1mA, RBE = ∞
Collector cutoff current	ICBO	—	—	10	μA	VCB = 100V, IE = 0
Emitter cutoff current	IEBO	—	—	10	μA	VE B = 3V, IC = 0
DC current transfer ratio	hFE	30	—	100		VCE = 10 V, IC = 10mA
Base to emitter voltage	VBE	—	—	1	V	VCE = 10 V, IC = 10mA
Collector to emitter saturation voltage	VCE(sat)	—	—	1	V	IC = 200mA, IB = 20mA
Gain bandwidth product	fT	1.0	1.4	—	GHz	VCE = 10 V, IC = 50mA
Collector Output capacitance	Cob	—	2.4	3.5	pF	VCB = 30V, IE = 0 f = 1MHz

Main Characteristics



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Package Dimentions

Unit: mm

