

2SA1958

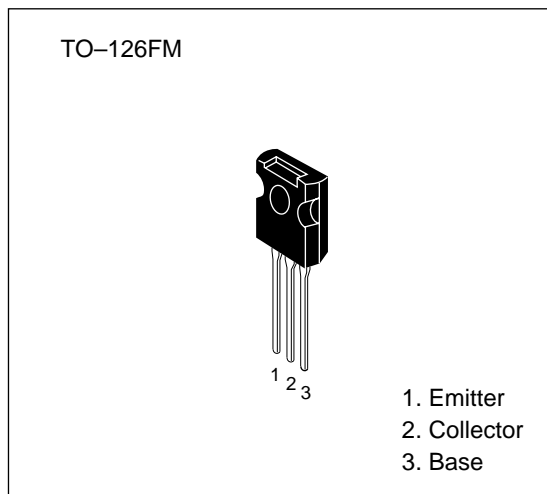
Silicon PNP Epitaxial

Application

High frequency amplifier

Features

- Excellent high frequency characteristics
 $f_T = 500$ MHz typ
- High voltage and low output capacitance
 $V_{CEO} = -150$ V, $C_{ob} = 5.0$ pF typ
- Suitable for wide band video amplifier
- Complementary pair with 2SC5120



Absolute Maximum Ratings (Ta = 25°C)

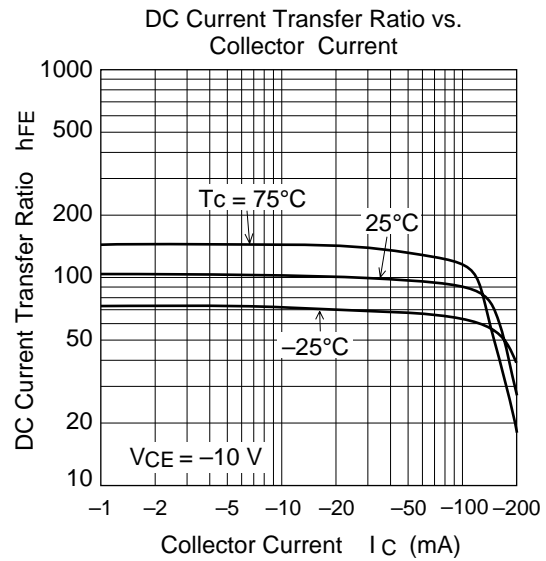
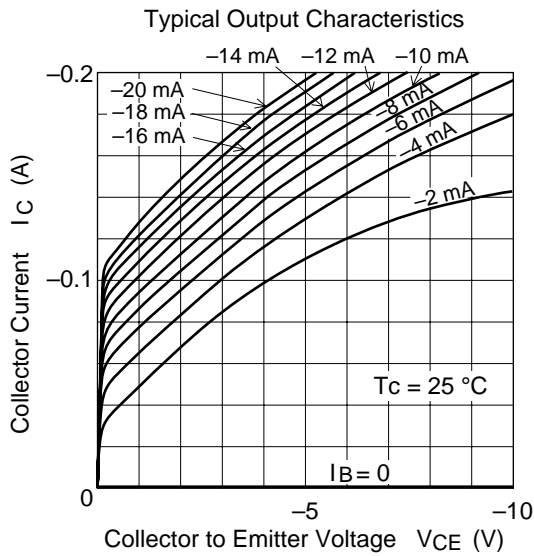
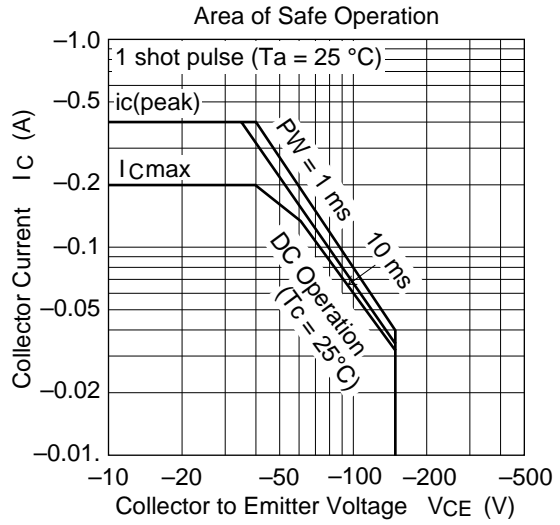
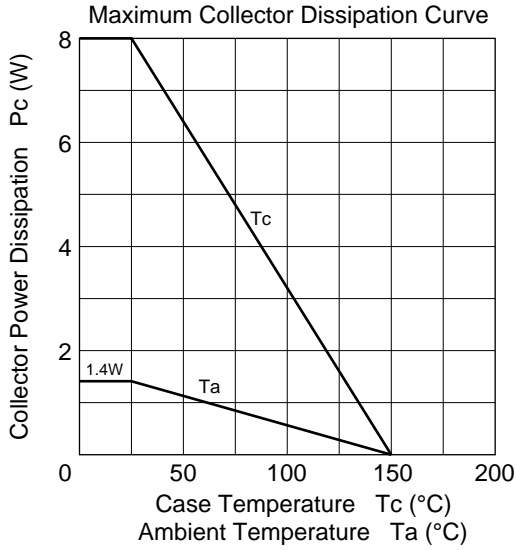
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-150	V
Collector to emitter voltage	V_{CEO}	-150	V
Emitter to base voltage	V_{EBO}	-3	V
Collector current	I_C	-0.2	A
Collector peak current	$i_c(\text{peak})$	-0.4	A
Collector power dissipation	P_C	1.4 8*1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Note: 1. $T_c = 25^\circ\text{C}$

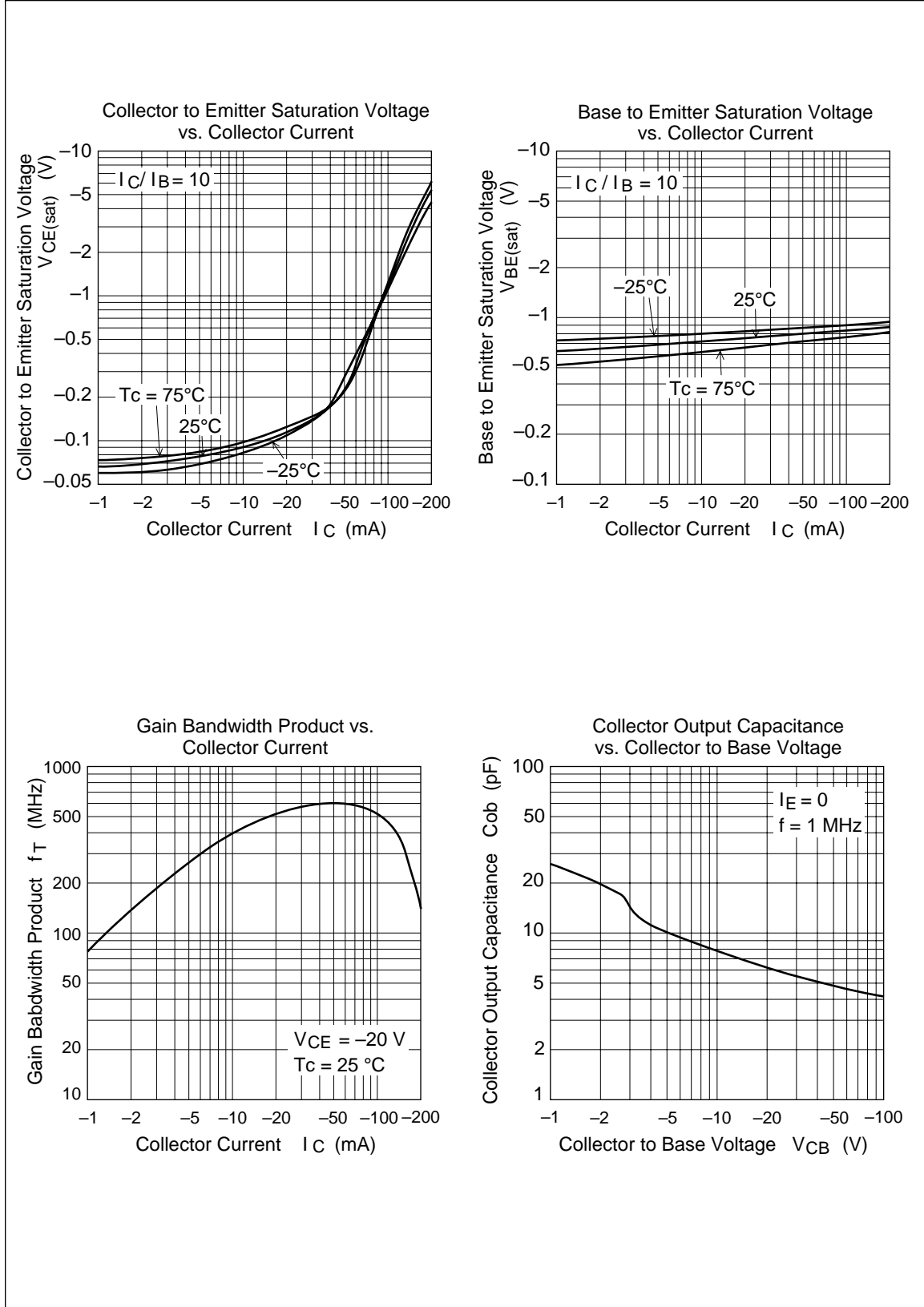
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Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-150	—	—	V	$I_C = -10 \mu A,$ $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-150	—	—	V	$I_C = -1 \text{ mA},$ $R_{BE} = \infty$
Collector cutoff current	I_{CBO}	—	—	-10	μA	$V_{CB} = -100 \text{ V},$ $I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-10	μA	$V_{EB} = -3 \text{ V},$ $I_C = 0$
DC current transfer ratio	h_{FE}	50	—	150	—	$V_{CE} = -10 \text{ V},$ $I_C = -10 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-1.0	V	$I_C = -50 \text{ mA}$ $I_B = -5 \text{ mA}$
Gain bandwidth product	f_T	400	500	—	MHz	$V_{CE} = -20 \text{ V}$ $I_C = -50 \text{ mA}$
Collector output capacitance	C_{ob}	—	5.0	6.0	pF	$V_{CB} = -30 \text{ V},$ $I_E = 0$ $f = 1 \text{ MHz}$



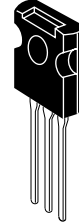
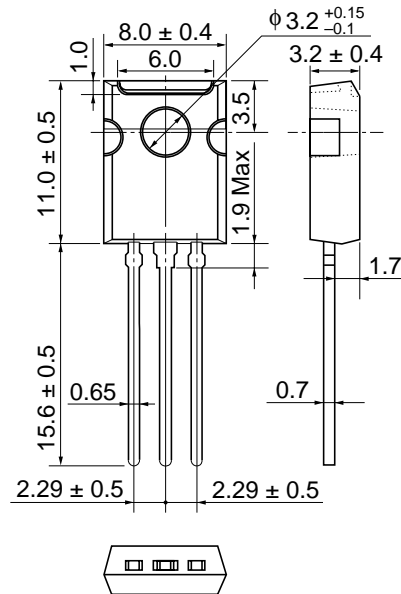
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Package Dimensions

Unit : mm

• TO-126FM



Hitachi Code	TO-126FM
EIAJ	—
JEDEC	—