
2SD2491, 2SD2492

Silicon NPN Epitaxial

HITACHI

Application

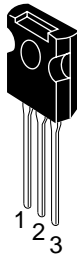
Low frequency high voltage amplifier

Features

- Isolated package
TO-126FM

Outline

TO-126FM



1. Emitter
2. Collector
3. Base

2SD2491, 2SD2492

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings		Unit
		2SD2491	2SD2492	
Collector to base voltage	V _{CBO}	160	200	V
Collector to emitter voltage	V _{CEO}	160	200	V
Emitter to base voltage	V _{EBO}	5	5	V
Collector current	I _C	100	100	mA
Collector power dissipation	P _C	1.35	1.35	W
Collector power dissipation	P _C ^{*1}	8	8	W
Junction temperature	T _j	150	150	°C
Storage temperature	T _{stg}	−55 to +150	−55 to +150	°C

Note: 1. Value at T_C = 25°C

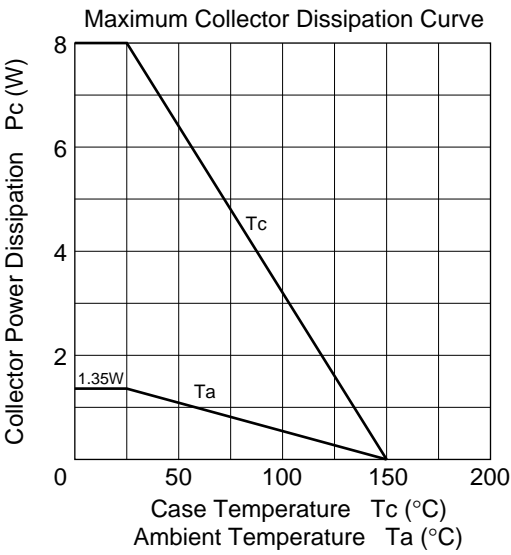
Electrical Characteristics (Ta = 25°C)

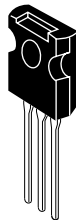
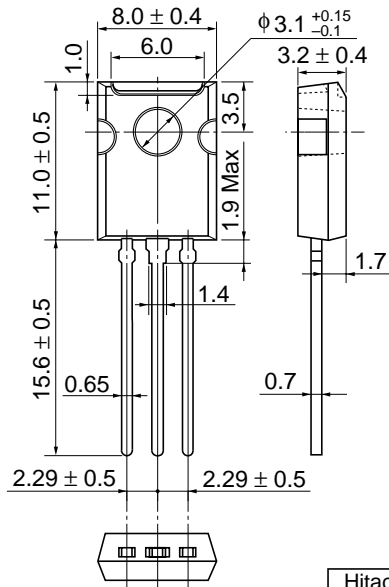
Item	Symbol	2SD2491			2SD2492			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	V _{(BR)CBO}	160	—	—	200	—	—	V	I _C = 10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	160	—	—	200	—	—	V	I _C = 1 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	5	—	—	5	—	—	V	I _E = 10 μA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	10	—	—	—	μA	V _{CB} = 140 V, I _E = 0
		—	—	—	—	—	10	μA	V _{CB} = 160 V, I _E = 0
DC current transfer ratio h _{FE1} ^{*1}		60	—	320	60	—	320		V _{CE} = 5 V, I _C = 10 mA
DC current transfer ratio h _{FE2}		30	—	—	30	—	—		V _{CE} = 5 V, I _C = 1 mA
Base to emitter voltage	V _{BE}	—	—	1.5	—	—	1.5	V	V _{CE} = 5 V, I _C = 10 mA
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	2	—	—	2	V	I _C = 30 mA, I _B = 3 mA
Gain bandwidth product	f _T	—	140	—	—	140	—	MHz	V _{CE} = 5 V, I _C = 10 mA
Collector output capacitance	Cob	—	3.8	—	—	3.8	—	pF	V _{CB} = 10 V, I _E = 0 f = 1 MHz

Note: 1. The 2SD2491 and 2SD2492 are grouped by h_{FE1} and its specification is as follows.

B	C	D
60 to 120	100 to 200	160 to 320

See characteristic curves of 2SD1609, 2SD1610.





Hitachi Code	TO-126FM
JEDEC	—
EIAJ	—
Weight (reference value)	0.87 g

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