2SA715

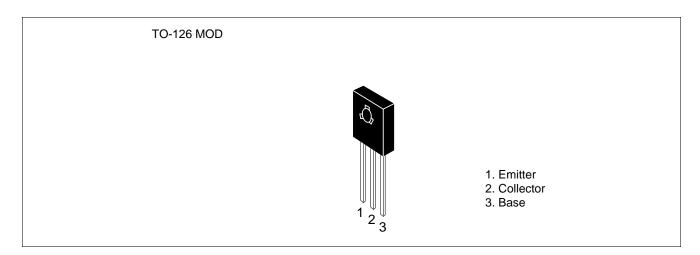
Silicon PNP Epitaxial

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Application

Low frequency power amplifier complementary pair with 2SC1162

Outline



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

Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	- 35	V
Collector to emitter voltage	V _{CEO}	-35	V
Emitter to base voltage	V_{EBO}	- 5	V
Collector current	I _c	-2.5	A
Collector peak current	I _{C(peak)}	-3	A
Collector power dissipation	P _c	0.75	W
	P _c *1	10	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

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



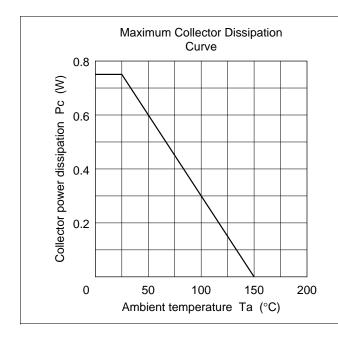
2SA715

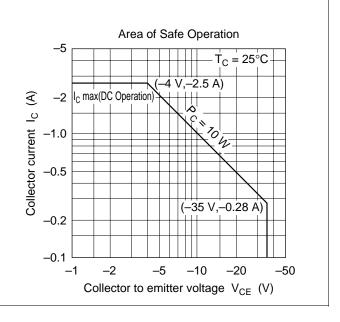
Electrical Characteristics (Ta = 25°C)

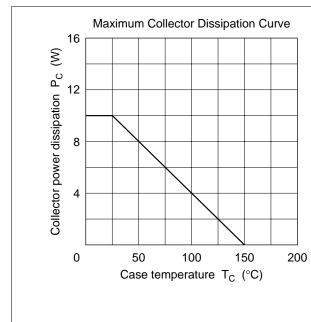
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-35	_	_	V	$I_{c} = -1 \text{ mA}, I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-35	_	_	V	$I_{\rm C} = -10$ mA, $R_{\rm BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	- 5	_	_	V	$I_{E} = -1 \text{ mA}, I_{C} = 0$
Collector cutoff current	I _{CBO}	_	_	-20	μΑ	$V_{CB} = -35 \text{ V}, I_{E} = 0$
DC current transfer ratio	h _{FE} *1	60	_	320		$V_{CE} = -2 \text{ V}, I_{C} = -0.5 \text{ A}$
	h _{FE}	20	_	_		$V_{CE} = -2 \text{ V}, I_{C} = -1.5 \text{ A}$ (Pulse test)
Base to emitter voltage	V_{BE}	_	-1.0	-1.5	V	$V_{CE} = -2 \text{ V}, I_{C} = -1.5 \text{ A}$ (Pulse test)
Collector to emitter saturation voltage	V _{CE(sat)}	_	-0.5	-1.0	V	$I_{\rm C} = -2 \text{ A}, I_{\rm B} = -0.2 \text{ A}$ (Pulse test)
Gain bandwidth product	f _T		160		MHz	$V_{CE} = -2 \text{ V}, I_{C} = -0.2 \text{ A}$ (Pulse test)

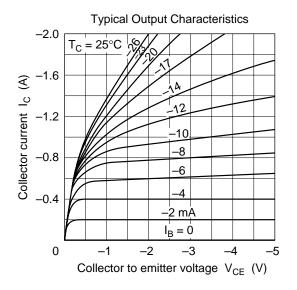
Note: 1. The 2SA715 is grouped by h_{FE} as follows.

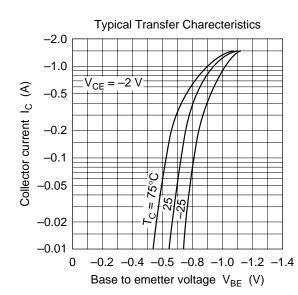
В	С	D
60 to 120	100 to 200	160 to 320

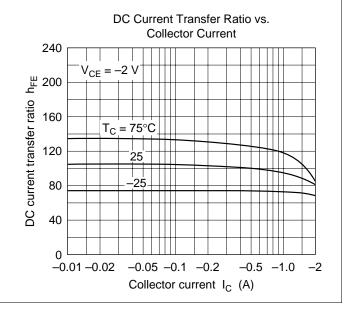




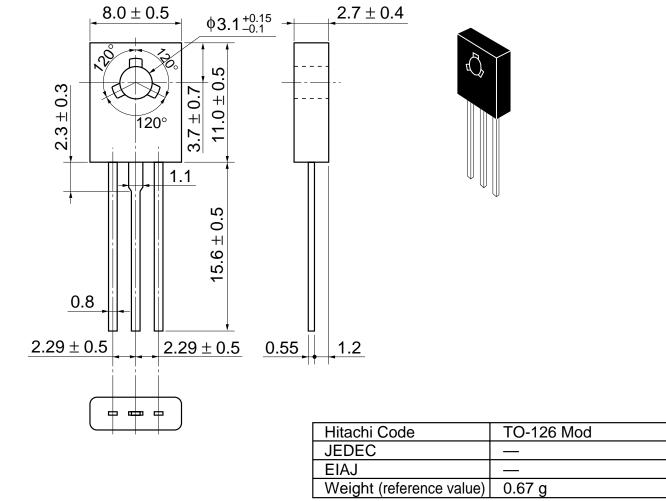








Unit: mm



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