TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT process)

2SA1162

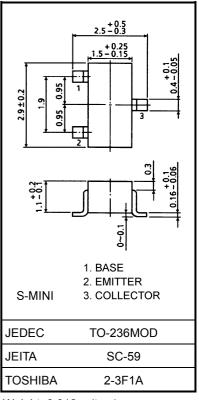
Audio Frequency General Purpose Amplifier Applications

Unit: mm

- $\bullet~$ High voltage and high current: $V_{\rm CEO}$ = –50 V, $I_{\rm C}$ = –150 mA (max)
- Excellent hFE linearity: hFE (IC = -0.1 mA)/hFE (IC = -2 mA) = 0.95 (typ.)
- High hFE: hFE = $70 \sim 400$
- Low noise: NF = 1dB (typ.), 10dB (max)
- Complementary to 2SC2712
- Small package

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit	
Collector-base voltage	V _{CBO}	-50	V	
Collector-emitter voltage	V _{CEO}	-50	V	
Emitter-base voltage	V _{EBO}	-5	V	
Collector current	IC	-150	mA	
Base current	ΙΒ	-30	mA	
Collector power dissipation	PC	150	mW	
Junction temperature	Tj	125	°C	
Storage temperature range	T _{stg}	-55~125	°C	



Weight: 0.012 g (typ.)

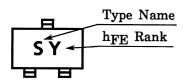
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = -50 \text{ V}, I_E = 0$	_	_	-0.1	μΑ
Emitter cut-off current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_{C} = 0$		_	-0.1	μΑ
DC current gain	h _{FE} (Note)	V _{CE} = -6 V, I _C = -2 mA	70	_	400	
Collector-emitter saturation voltage	V _{CE (sat)}	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		-0.1	-0.3	٧
Transition frequency	f _T	$V_{CE} = -10 \text{ V}, I_{C} = -1 \text{ mA}$	80	_	_	MHz
Collector output capacitance	C _{ob}	$V_{CB} = -10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$	_	4	7	pF
Noise figure	NF	$V_{CE} = -6 \text{ V}, I_{C} = -0.1 \text{ mA}, f = 1 \text{ kHz}, $ Rg = 10 k Ω ,		1.0	10	dB

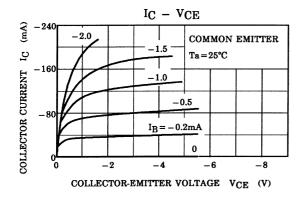
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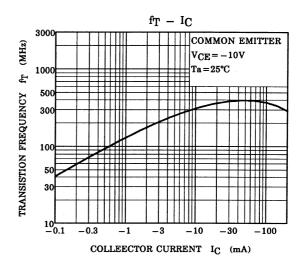
Note: hFE classification O (O): 70~140, Y (Y): 120~240, GR (G): 200~400, () marking symbol

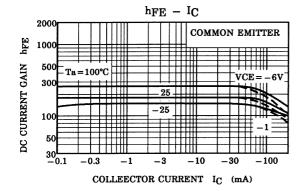
Marking

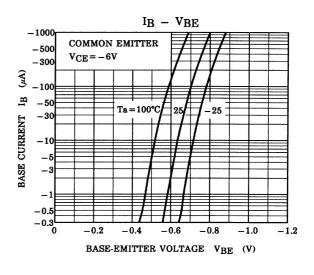


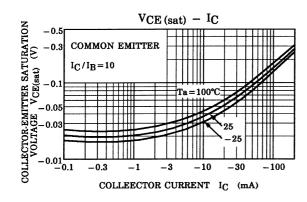
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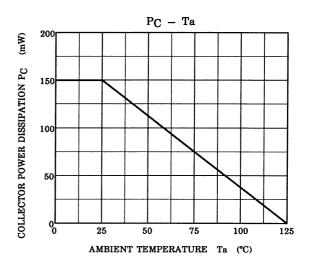


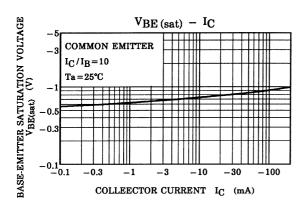












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