TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC2712

Audio Frequency General Purpose Amplifier Applications

High voltage and high current: VCEO = 50 V, IC = 150 mA (max)

• Excellent hFE linearity: hFE (IC = 0.1 mA)/ hFE (IC = 2 mA) = 0.95 (typ.)

• High hFE: $hFE = 70 \sim 700$

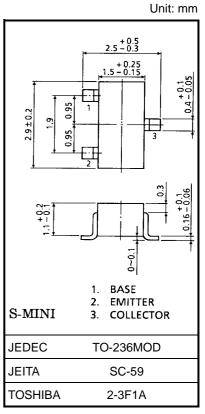
• Low noise: NF = 1dB (typ.), 10dB (max)

• Complementary to 2SA1162

• Small package

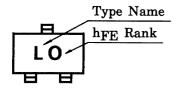
Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	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.)

Marking



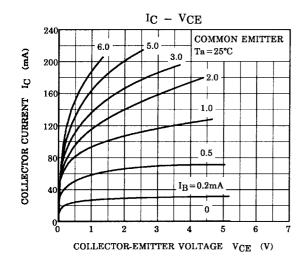
Electrical Characteristics (Ta = 25°C)

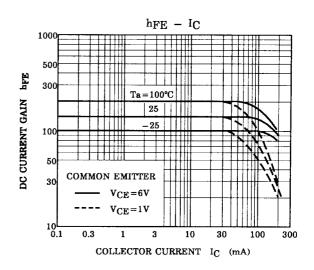
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 60 V, I _E = 0	_	_	0.1	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	0.1	μΑ
DC current gain	h _{FE} (Note)	$V_{CE} = 6 \text{ V}, I_{C} = 2 \text{ mA}$	70	_	700	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 100 mA, I _B = 10 mA	_	0.1	0.25	V
Transition frequency	f _T	V _{CE} = 10 V, I _C = 1 mA	80	_	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	2.0	3.5	pF
Noise figure	NF	$\begin{aligned} &V_{CE}=6 \text{ V, I}_{C}=0.1 \text{ mA, f}=1 \text{ kHz,} \\ &R_{g}=10 \text{ k}\Omega \end{aligned}$	_	1.0	10	dB

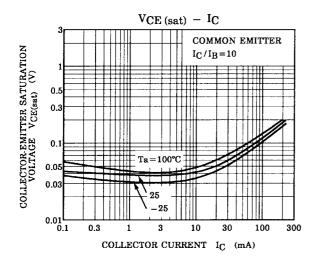
Note: h_{FE} classification O (O): 70~140, Y (Y): 120~240, GR (G): 200~400, BL (L): 350~700

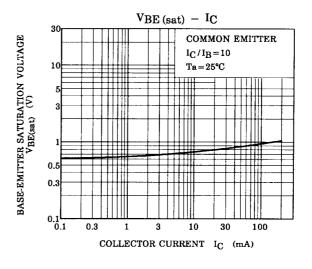
() marking symbol

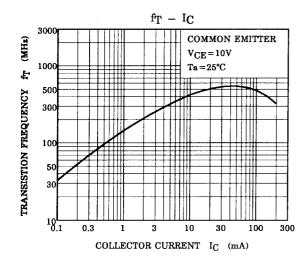
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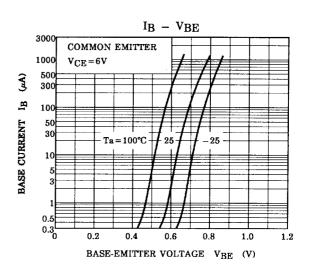


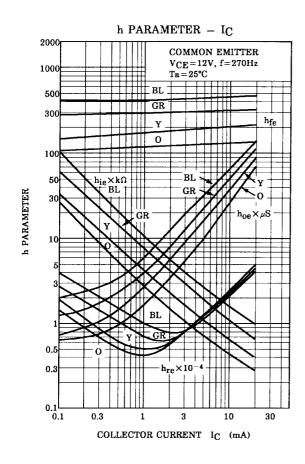


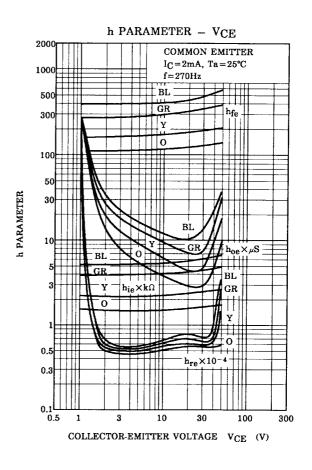


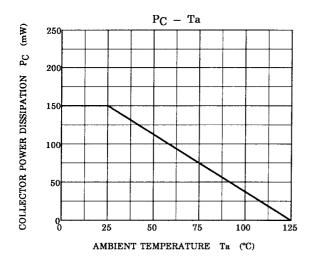












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