

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC4688

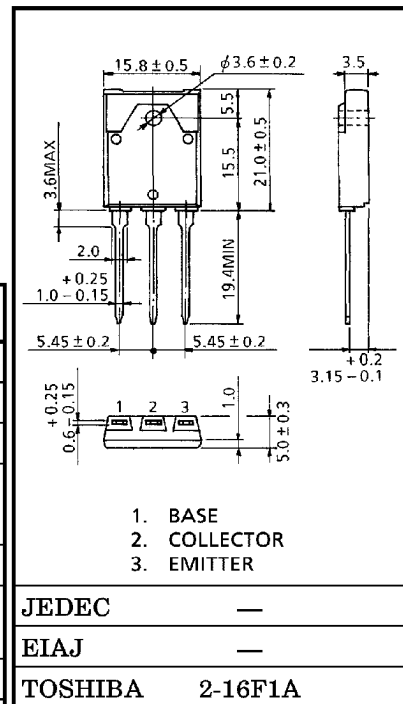
POWER AMPLIFIER APPLICATIONS

Unit in mm

- Complementary to 2SA1803
- Recommend for 40W High Fidelity Audio Frequency Amplifier output Stage.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	80	V
Collector-Emitter Voltage	V _{CEO}	80	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current	DC	I _C	6
	Pulse	I _{CP}	12
Base Current	I _B	0.6	A
Collector Power Dissipation (Tc = 25°C)	P _C	55	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



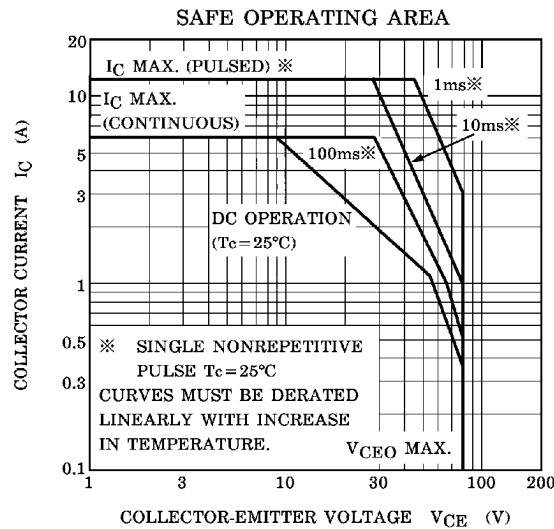
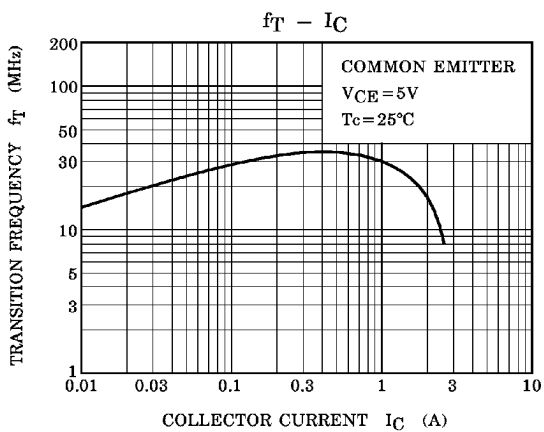
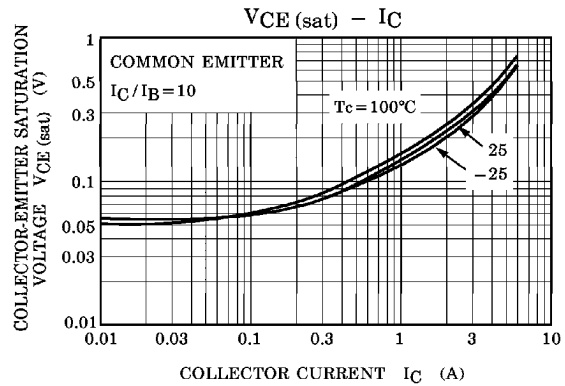
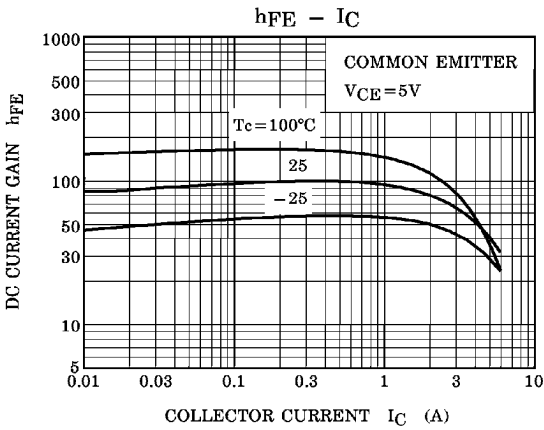
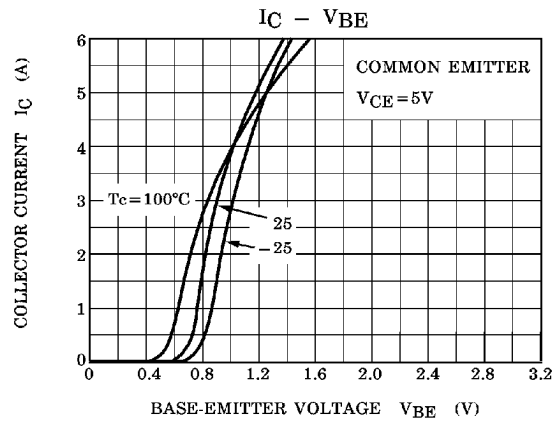
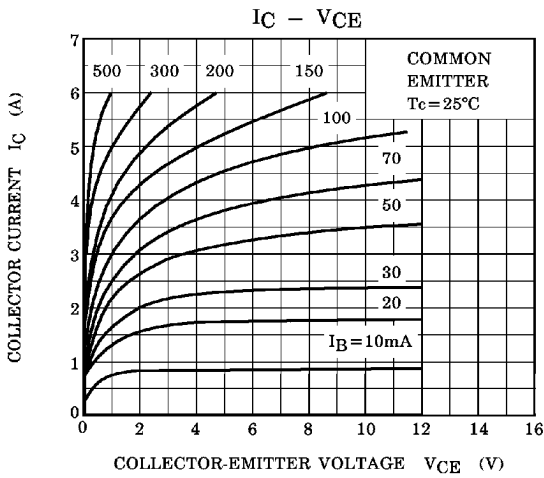
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CB0}	V _{CB} = 80V, I _E = 0	—	—	5.0	μA
Emitter Cut-off Current	I _{EB0}	V _{EB} = 5V, I _C = 0	—	—	5.0	μA
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C = 50mA, I _B = 0	80	—	—	V
DC Current Gain	h _{FE} (1) (Note)	V _{CE} = 5V, I _C = 1A	55	—	160	
	h _{FE} (2)	V _{CE} = 5V, I _C = 3A	35	75	—	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 5A, I _B = 0.5A	—	0.45	2.0	V
Base-Emitter Voltage	V _{BE}	V _{CE} = 5V, I _C = 3A	—	0.92	1.5	V
Transition Frequency	f _T	V _{CE} = 5V, I _C = 1A	—	30	—	MHz
Collector Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	—	105	—	pF

Note : h_{FE}(1) Classification R : 55~110, O : 80~160

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