

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

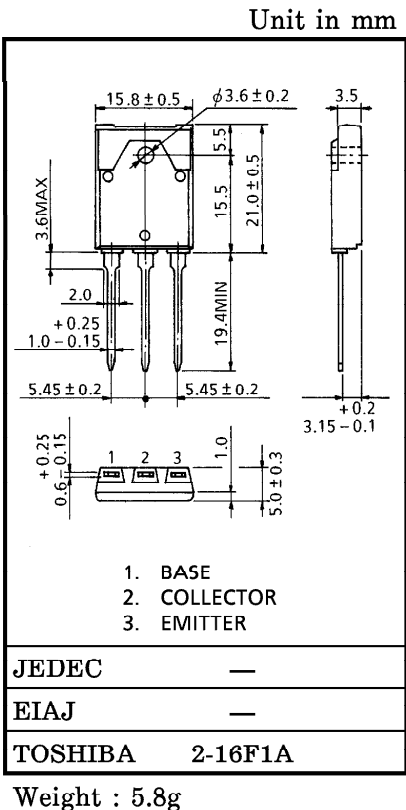
2SC4689

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1804
- Recommend for 55W High Fidelity Audio Frequency Amplifier output Stage.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	120	V
Collector-Emitter Voltage		V_{CEO}	120	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	8	A
	Pulse	I_{CP}	16	
Base Current		I_B	0.8	A
Collector Power Dissipation (Tc = 25°C)		P_C	70	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C



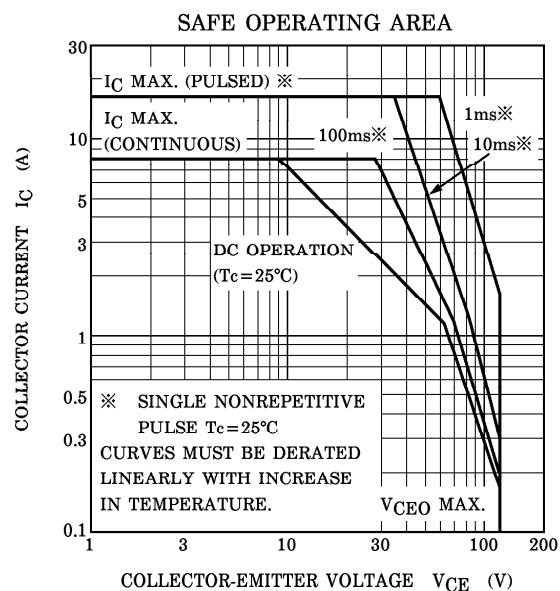
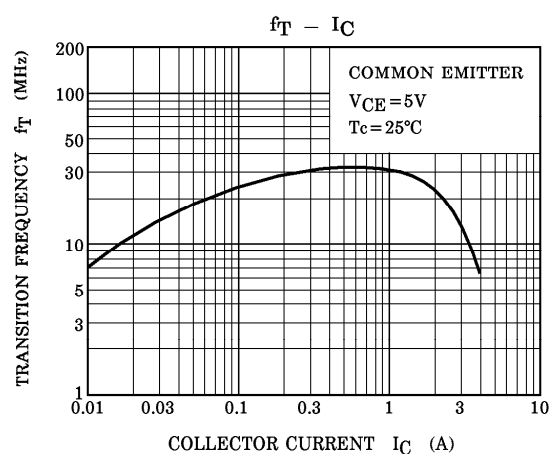
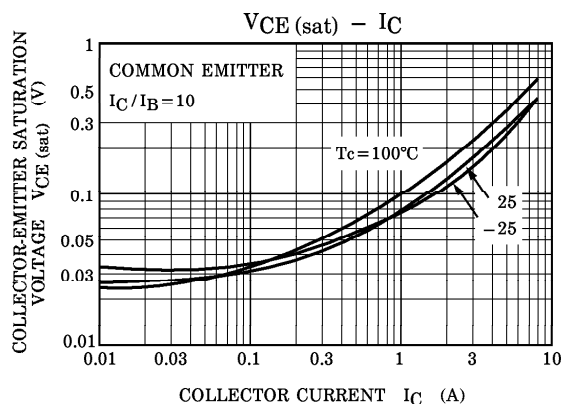
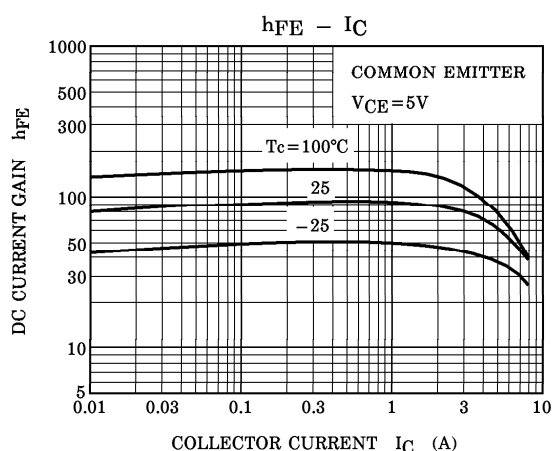
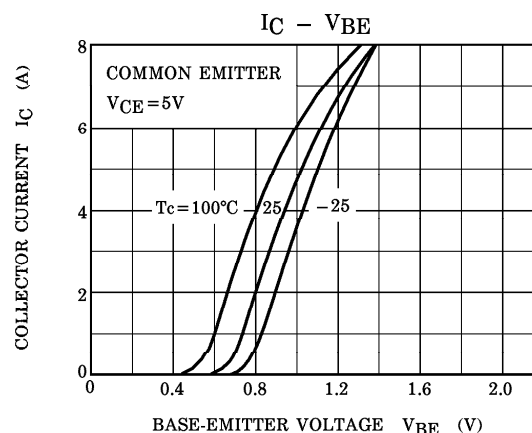
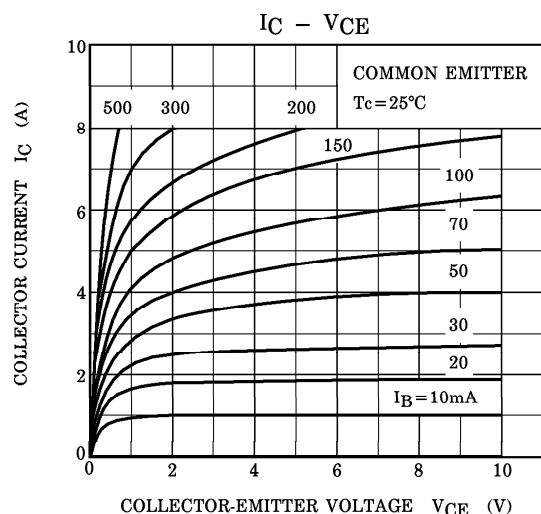
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 120V, I_E = 0$	—	—	5.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	—	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = 50mA, I_B = 0$	120	—	—	V
DC Current Gain	$h_{FE} (1)$ (Note)	$V_{CE} = 5V, I_C = 1A$	55	—	160	
	$h_{FE} (2)$	$V_{CE} = 5V, I_C = 4A$	35	75	—	
Collector-Emitter Saturation Voltage	$V_{CE (sat)}$	$I_C = 6A, I_B = 0.6A$	—	0.35	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 4A$	—	0.95	1.5	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 1A$	—	30	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	190	—	pF

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

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