

TOSHIBA

2SC4690

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

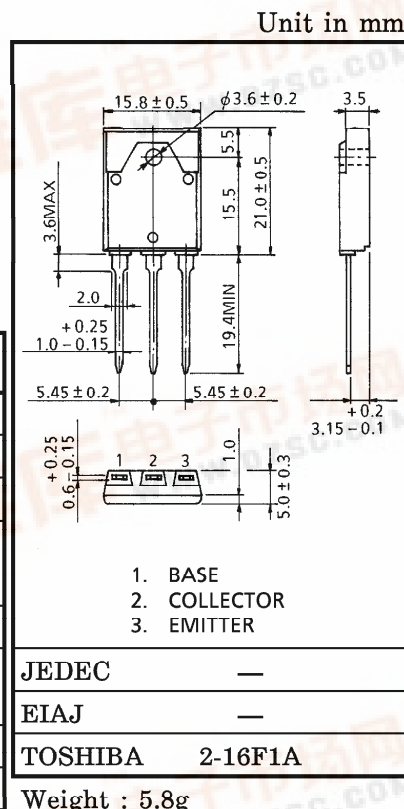
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POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1805
- Recommend for 70W High Fidelity Audio Frequency Amplifier output Stage.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	140	V
Collector-Emitter Voltage		V_{CEO}	140	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	10	A
	Pulse	I_{CP}	20	
Base Current		I_B	1	A
Collector Power Dissipation ($T_c = 25^\circ\text{C}$)		P_C	80	W
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=140V, I_E=0$	—	—	5.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	—	—	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C=50mA, I_B=0$	140	—	—	V
DC Current Gain	$h_{FE} (1)$ (Note)	$V_{CE}=5V, I_C=1A$	55	—	160	
	$h_{FE} (2)$	$V_{CE}=5V, I_C=5A$	35	85	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=7A, I_B=0.7A$	—	0.3	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=5A$	—	0.9	1.5	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	—	30	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	220	—	pF

Note : hFF (1) Classification R : 55~110, O : 80~160

