

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC5198

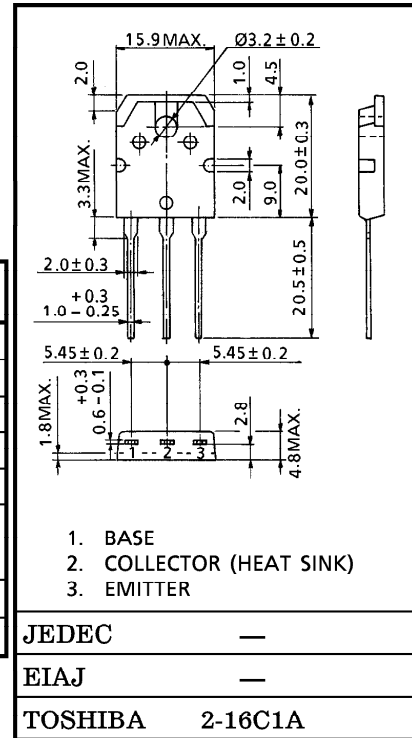
POWER AMPLIFIER APPLICATIONS

Unit in mm

- Complementary to 2SA1941
- Recommend for 70W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	140	V
Collector-Emitter Voltage	V _{CEO}	140	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	10	A
Base Current	I _B	1	A
Collector Power Dissipation (Tc = 25°C)	P _C	100	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 4.7g (Typ.)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CB0}	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	83	—	
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	—	170	—	pF

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

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