

2SC3181N

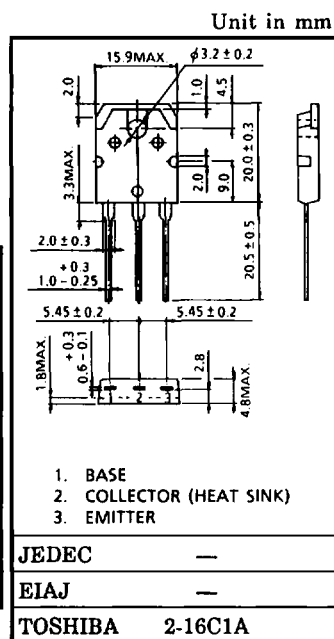
SILICON NPN TRIPLE DIFFUSED TYPE

POWER AMPLIFIER APPLICATIONS.

- Complementary to 2SA1264N
- 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	I _C	8	A
Base Current	I _B	0.8	A
Collector Power Dissipation (T _c = 25°C)	P _C	80	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 4.7g

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

