

2SC790

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

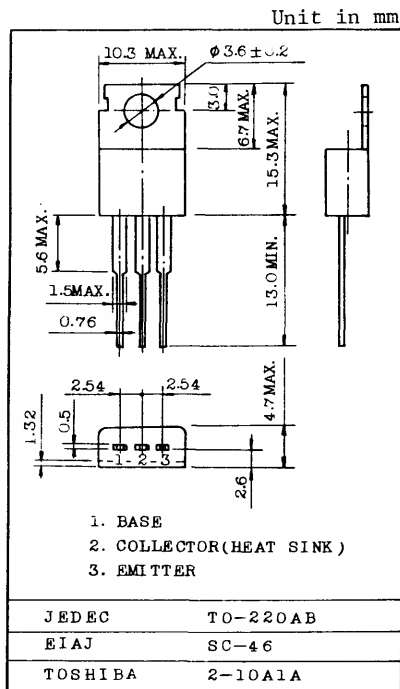
POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Complementary to 2SA490.
- Recommended for 10W High-Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CE0}	40	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	3	A
Emitter Current	I_E	-3	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	25	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$



Mounting Kit No. AC75
Weight : 1.9g

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB}=30\text{V}, I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EB0}	$V_{EB}=5\text{V}, I_C=0$	-	-	100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=50\text{mA}, I_B=0$	40	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EB0}$	$I_E=10\text{mA}, I_C=0$	5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=2\text{V}, I_C=0.5\text{A}$	40	-	240	
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=2\text{A}$	13	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=0.2\text{A}$	-	0.25	1.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=2\text{V}, I_C=2\text{A}$	-	0.85	1.8	V
Transition Frequency	f_T	$V_{CE}=2\text{V}, I_C=0.5\text{A}$	3	10	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	85	-	pF

Note: $h_{FE(1)}$ Classification R : 40 ~ 80, O : 70 ~ 140, Y : 120 ~ 240