



2SD1148

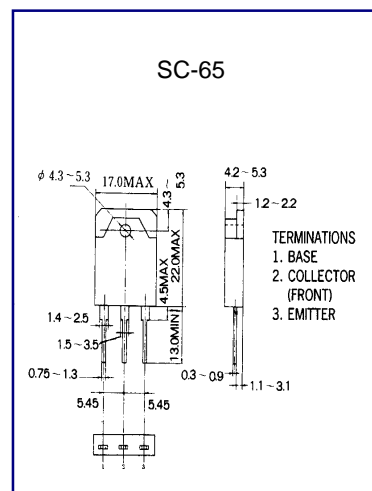
NPN PLANAR SILICON TRANSISTOR

AUDIO POWER AMPLIFIER DC TO DC CONVERTER

- High Current Capability
- High Power Dissipation
- Complementary to 2SB863

ABSOLUTE MAXIMUM RATING ($T_A=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	200	V
Collector-Emitter Voltage	V_{CE0}	140	V
Emitter-Base voltage	V_{EB0}	6	V
Collector Current (DC)	I_C	10	A
Collector Dissipation	P_C	100	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$



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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	BV_{CB0}	$I_C=5\text{ mA}$ $I_E=0$	200			V
Collector Emitter Breakdown Voltage	BV_{CE0}	$I_C=10\text{ mA}$ $R_{BE}=\infty$	140			V
Emitter Base Breakdown Voltage	BV_{EB0}	$I_E=5\text{ mA}$ $I_C=0$	6			V
Collector Cutoff Current	I_{CB0}	$V_{CB}=100\text{ V}$ $I_E=0$			0.1	mA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=4\text{ V}$ $I_C=0$			0.1	mA
*DC Current Gain	h_{FE1}	$V_{CE}=5\text{ V}$ $I_C=1\text{ A}$	55		160	
DC Current Gain	h_{FE2}	$V_{CE}=5\text{ V}$ $I_C=5\text{ A}$	50			
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5\text{ A}$ $I_B=0.5\text{ A}$			2.0	V