



## 2SD1148

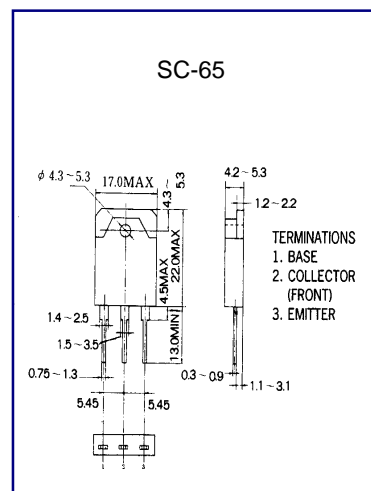
## NPN PLANAR SILICON TRANSISTOR

### 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