

Silicon PNP Power Transistor

2SA748

DESCRIPTION

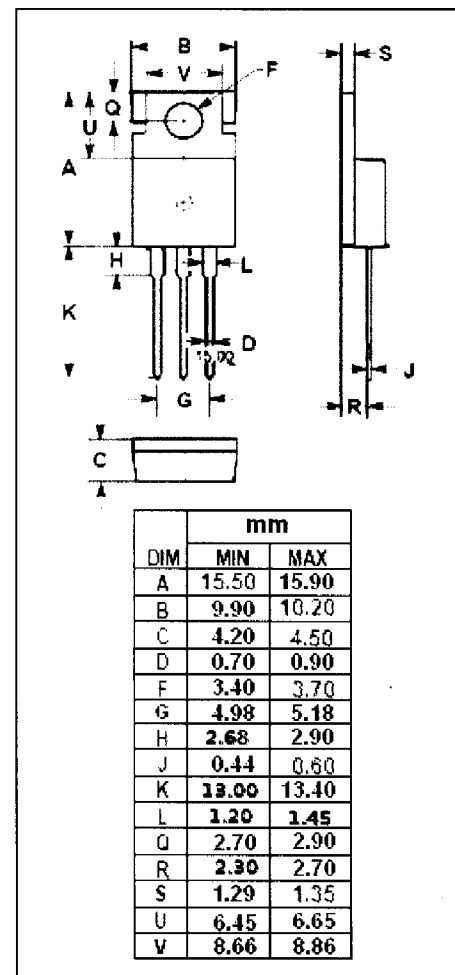
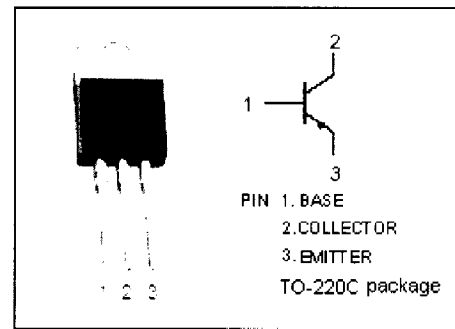
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -50V(\text{Min})$
- Large Power Dissipation-
: $P_C = 15W @ T_C = 25^\circ C$
- Complement to Type 2SC1398

APPLICATIONS

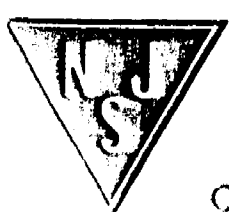
- Designed for medium power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-2	A
I_{CM}	Collector Current-Peak	-3	A
P_C	Total Power Dissipation @ $T_C = 25^\circ C$	15	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; I_B = 0$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -1\text{mA}; I_E = 0$	-70			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.1\text{A}$			-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40\text{V}; I_E = 0$			-1.0	μA
I_{CEO}	Collector Cutoff Current	$V_{CE} = -20\text{V}; I_B = 0$			-100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-100	μA
h_{FE-1}	DC Current Gain	$I_C = -0.1\text{A}; V_{CE} = -5\text{V}$	30			
h_{FE-2}	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -5\text{V}$	50		220	
f_T	Current-Gain—Bandwidth Product	$I_C = -500\text{mA}; V_{CE} = -5\text{V}$		120		MHz

◆ h_{FE-2} Classifications

P	Q	R
50-100	80-160	120-220