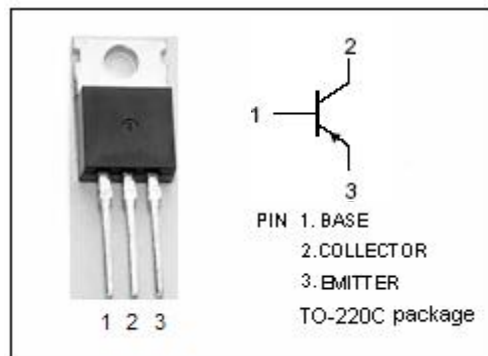


**isc Silicon PNP Power Transistor**
**2SA748**
**DESCRIPTION**

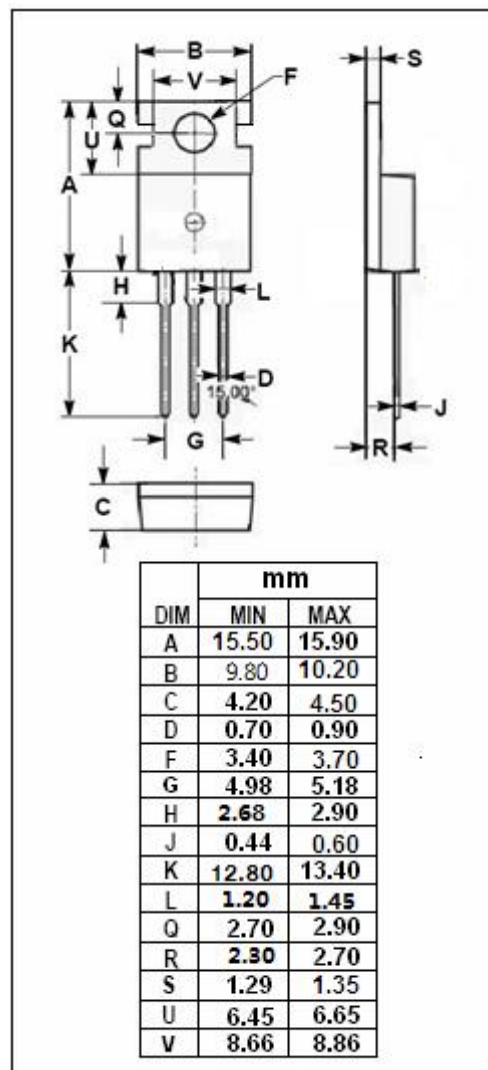
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -50V(\text{Min})$
- Large Power Dissipation-  
:  $P_C = 15W @ T_C = 25^\circ\text{C}$
- Complement to Type 2SC1398
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**APPLICATIONS**

- Designed for medium power amplifier applications.

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

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 @ $T_C=25^\circ\text{C}$	15	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor**
**2SA748**
**ELECTRICAL CHARACTERISTICS**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA; I <sub>B</sub> = 0	-50			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>E</sub> = 0	-70			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.1A			-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -40V; I <sub>E</sub> = 0			-1.0	μ A
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -20V; I <sub>B</sub> = 0			-100	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-100	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -0.1A; V <sub>CE</sub> = -5V	30			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	50		220	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -500mA; V <sub>CE</sub> = -5V		120		MHz

**◆ h<sub>FE-2</sub> Classifications**

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

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