

ISC Silicon PNP Power Transistor

2SB747

DESCRIPTION

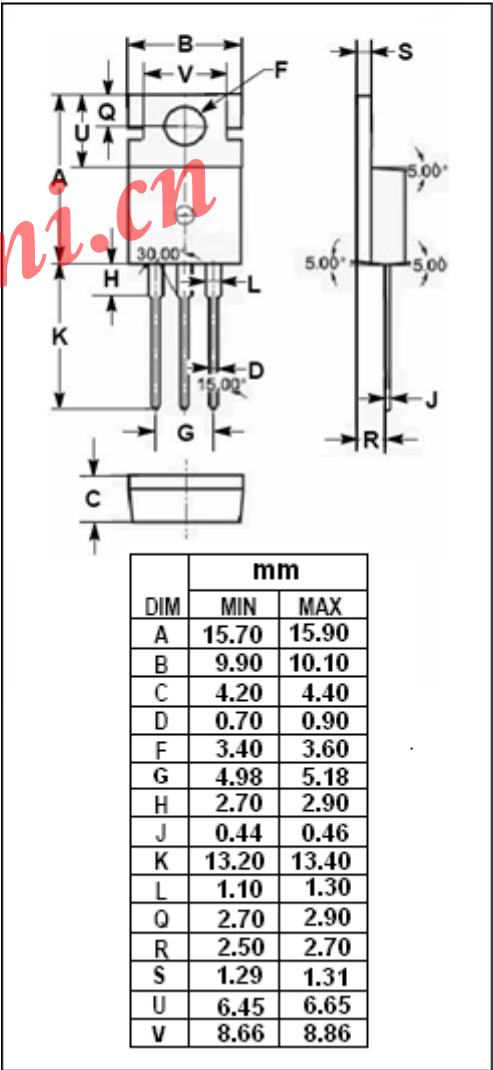
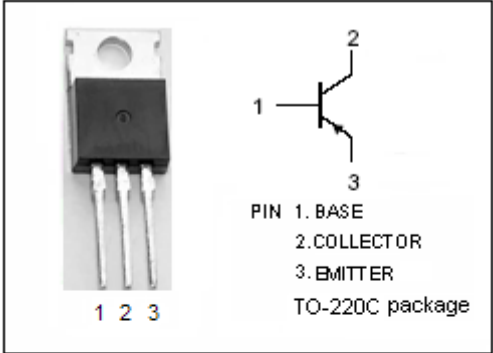
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -80V(\text{Min})$
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SD812

APPLICATIONS

- High power amplifier applications.
- Suitable for 15~20W home stereo output amplifier and voltage regulator.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	40	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



ISC Silicon PNP Power Transistor**2SB747****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3A; I_B = -0.3A$			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -3A; V_{CE} = -5V$			-1.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80V; I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -20mA; V_{CE} = -5V$	20			
h_{FE-2}	DC Current Gain	$I_C = -1A; V_{CE} = -5V$	40		200	
h_{FE-3}	DC Current Gain	$I_C = -3A; V_{CE} = -5V$	20			
C_{OB}	Collector Output Capacitance	$I_E = 0; V_{CB} = -10V; f = 1MHz$		190		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5A; V_{CE} = -5V$		7		MHz

◆ **h_{FE-2} Classifications**

R	Q	P
40-80	60-120	100-200