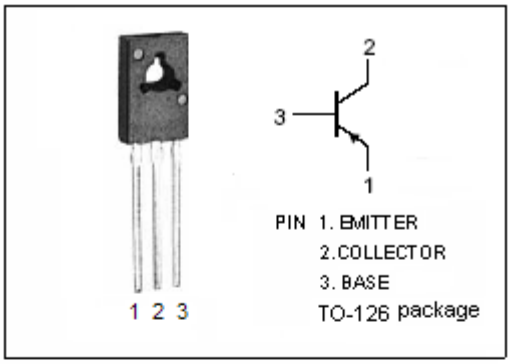
isc Silicon PNP Power Transistor BD788

DESCRIPTION

- DC Current Gain-
  : h_{FE}= 40~250(Min)@ I_C= -0.2A
- Collector-Emitter Sustaining Voltage -
  : $V_{CEO(SUS)}$= -60V(Min)
- Complement to type BD787



APPLICATIONS

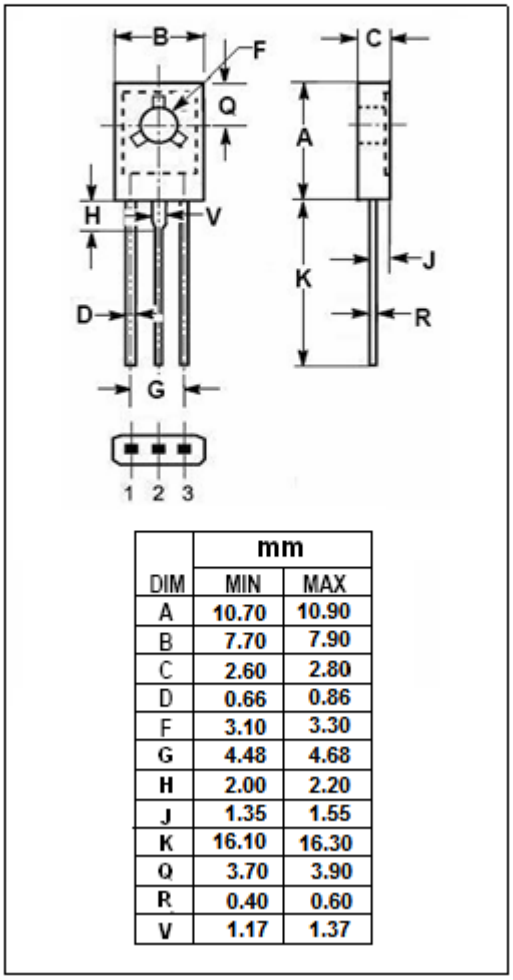
- Designed for low power audio amplifier and low current, high-speed switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-4	A
I_{CM}	Collector Current-Peak	-8	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @ T_C=25℃	15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	8.34	℃/W



DIM	mm MIN	MAX
A	10.70	10.90
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	16.10	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -10mA; I_B= 0	-60			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -0.5A; I_B= -50mA			-0.4	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -1A; I_B= -0.1A			-0.6	V
$V_{CE(sat)-3}$	Collector-Emitter Saturation Voltage	I_C= -2A; I_B= -0.2A			-0.8	V
$V_{CE(sat)-4}$	Collector-Emitter Saturation Voltage	I_C= -4A; I_B= -0.8A			-2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -2A; I_B= 0.2A			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -2A; V_{CE}= -3V			-1.8	V
I_{CEX}	Collector Cutoff Current	V_{CB}= -80V;$V_{BE(off)}$= -1.5V V_{CB}= -40V;$V_{BE(off)}$= -1.5V;T_C=125℃			-1.0 -0.1	μA mA
I_{CEO}	Collector Cutoff Current	V_{CE}= -30V; I_B= 0			-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C= 0			-1.0	μA
h_{FE-1}	DC Current Gain	I_C= -0.2A; V_{CE}= -3V	40		250	
h_{FE-2}	DC Current Gain	I_C= -1A; V_{CE}= -3V	25			
h_{FE-3}	DC Current Gain	I_C= -2A; V_{CE}= -3V	20			
h_{FE-4}	DC Current Gain	I_C= -4A; V_{CE}= -3V	5			
f_T	Current-Gain—Bandwidth Product	I_C= -0.1A; V_{CE}= -10V	50			MHz
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= -10V; f= 0.1MHz			70	pF