

isc Silicon NPN Power Transistor

BUP41

DESCRIPTION

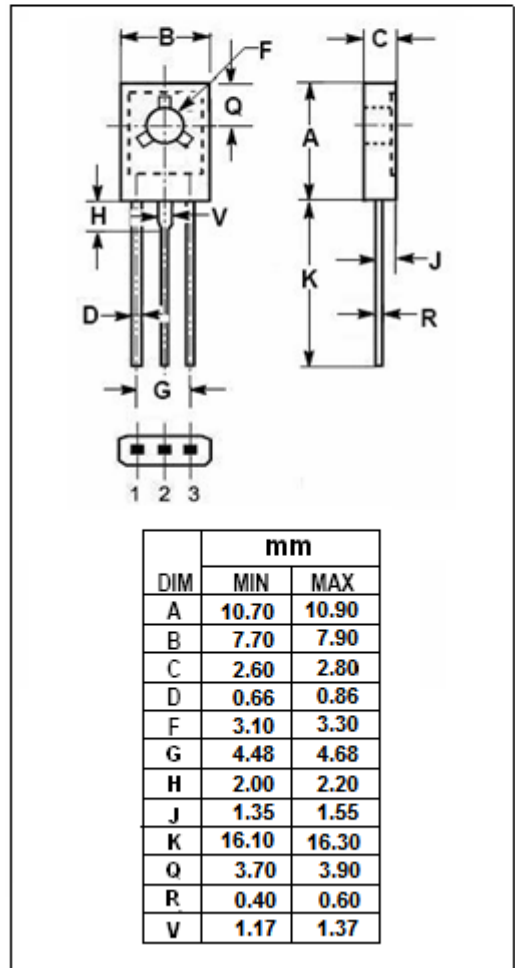
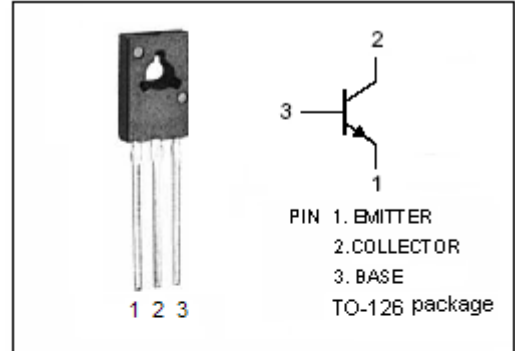
- High Collector Current- $I_C=6A$
- Low Collector Saturation Voltage -
: $V_{CE(sat)}=0.4V(Max)@ I_C=3A, I_B=0.1A$
- High Switching Speed
- Complement to Type BUP40

APPLICATIONS

- For audio amplifier and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	6	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	10	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**BUP41****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	$I_C= 3A; I_B= 0.1A$			0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 3A; I_B= 0.1A$			1.4	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 40V; I_E= 0$			1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 4V; I_C= 0$			1.0	μA
h_{FE-1}	DC Current Gain	$I_C= 1A; V_{CE}= 2V$	100		500	
h_{FE-2}	DC Current Gain	$I_C= 3A; V_{CE}= 2V$	40			
f_T	Current-Gain—Bandwidth Product	$I_C= 1A; V_{CE}= 5V$		120		MHz
C_{OB}	Output Capacitance	$I_E= 0; V_{CB}= 10V$		25		pF