

isc Silicon NPN Power Transistor

BUP41

DESCRIPTION

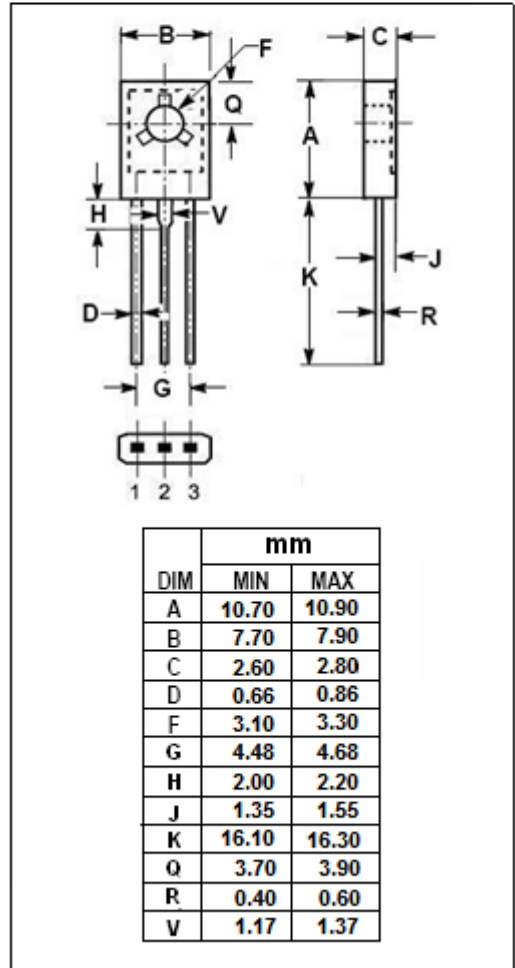
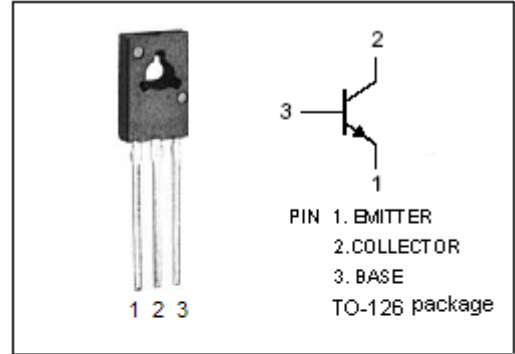
- High Collector Current- $I_C=6A$
- Low Collector Saturation Voltage -  
:  $V_{CE(sat)}=0.4V(Max)@ I_C=3A, I_B=0.1A$
- High Switching Speed
- Complement to Type BUP40

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	$\mu A$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 4V; I_C= 0$			1.0	$\mu A$
$h_{FE-1}$	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