

**isc Silicon NPN Power Transistor**

**2SC3421**

**DESCRIPTION**

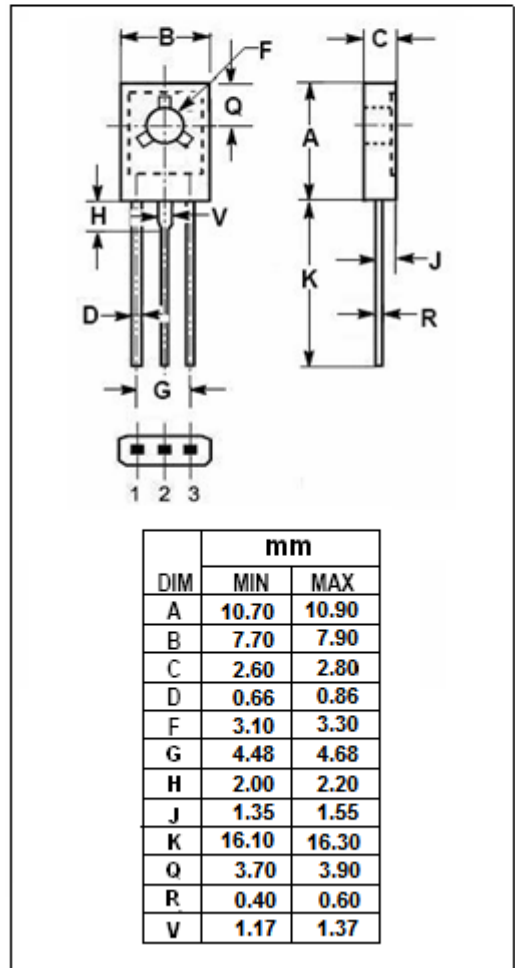
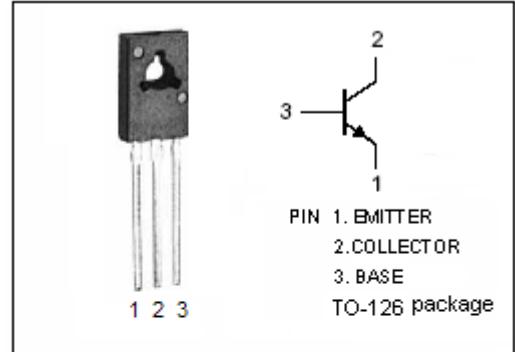
- High Collector-Emitter Breakdown Voltage  
:  $V_{(BR)CEO} = 120V(\text{Min})$
- Complement to Type 2SA1358

**APPLICATIONS**

- Designed for audio frequency power amplifier applications.
- Suitable for driver of 60 to 80 Watts audio amplifier.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	120	V
$V_{CEO}$	Collector-Emitter Voltage	120	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	1	A
$I_B$	Base Current-Continuous	0.1	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	10	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC3421****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=500\text{mA}; I_B=50\text{mA}$			1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=500\text{mA}; V_{CE}=5\text{V}$			1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=120\text{V}; I_E=0$			0.1	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			0.1	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=0.1\text{A}; V_{CE}=5\text{V}$	80		240	
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}; V_{CE}=5\text{V}$		120		MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}, f_{test}=1\text{MHz}$		15		pF

◆  **$h_{FE}$  Classifications**

O	Y
80-160	120-240