

isc Silicon NPN Power Transistor

2SC3514

DESCRIPTION

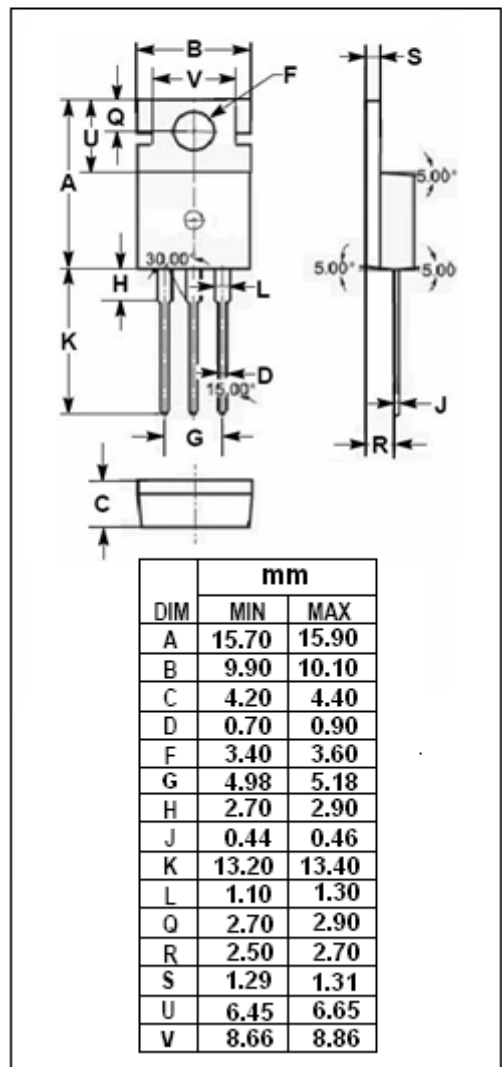
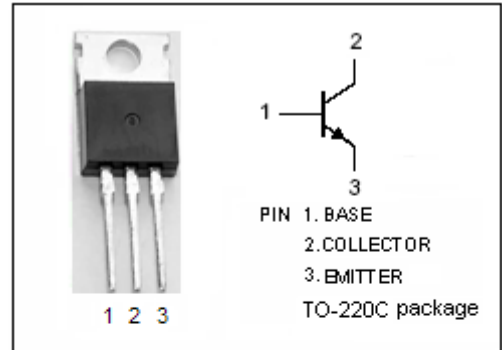
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 180V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SA1383

APPLICATIONS

- A audio frequency power amplifier

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	180	V
$V_{CEO}$	Collector-Emitter Voltage	180	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current-Continuous	0.1	A
$P_C$	Collector Power Dissipation@ $T_a=25^\circ\text{C}$	1.5	W
	Collector Power Dissipation@ $T_c=25^\circ\text{C}$	10	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC3514****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	$I_C=50\text{mA}; I_B=5\text{mA}$			0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=180\text{V}; I_E=0$			1.0	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=3.0\text{V}; I_C=0$			1.0	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C=1\text{mA}; V_{CE}=5\text{V}$	90			
$h_{FE-2}$	DC Current Gain	$I_C=10\text{mA}; V_{CE}=5\text{V}$	100		320	
$f_T$	Current-Gain—Bandwidth Product	$I_C=20\text{mA}; V_{CE}=10\text{V}$		200		MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f_{test}=1.0\text{MHz}$		3.2		pF

◆  **$h_{FE-2}$  Classifications**

Q	P
100-200	160-320