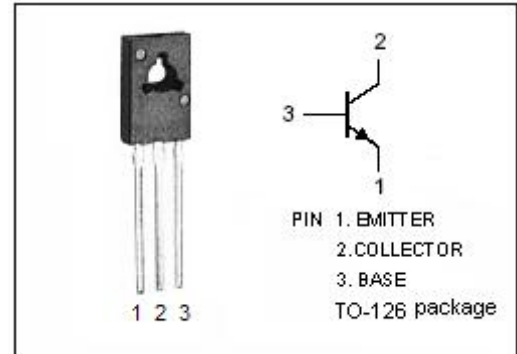


isc Silicon NPN Power Transistor
2SC2314
DESCRIPTION

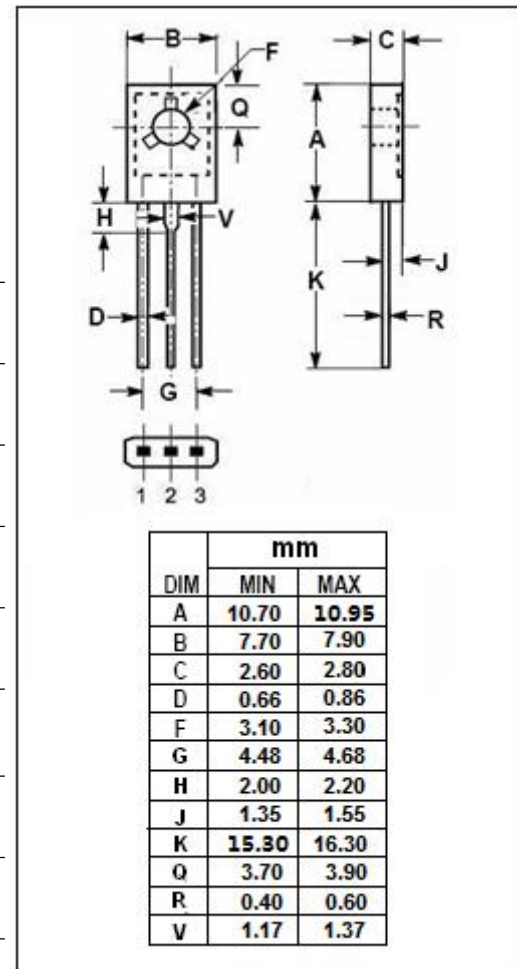
- Collector-Emitter Voltage-
: $V_{CER} = 75V(\text{Min})$; $R_{BE} = 150 \Omega$
- Collector Current-
: $I_C = 1.5A$
- Low Saturation Voltage
: $V_{CE(\text{sat})} = 0.6V(\text{MAX}) @ I_C = 0.5A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Power Amplifier Applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	75	V
V_{CER}	Collector-Emitter Voltage $R_{BE} = 150 \Omega$	75	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	1.5	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	0.8	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor

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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	$I_C=0.5\text{A}; I_B=0.05\text{A}$		0.2	0.6	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=40\text{V}; I_E=0$			1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			1	μA
h_{FE}	DC Current Gain	$I_C=500\text{mA}; V_{CE}=5\text{V}$	60		320	
f_T	Current-Gain—Bandwidth Product	$I_C=50\text{mA}; V_{CE}=0.5\text{V}$	180			MHz

◆ h_{FE} Classifications

D	E	F
60-120	100-200	160-320

Notice:

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