

**isc Silicon NPN Power Transistor**
**KT815A**
**DESCRIPTION**

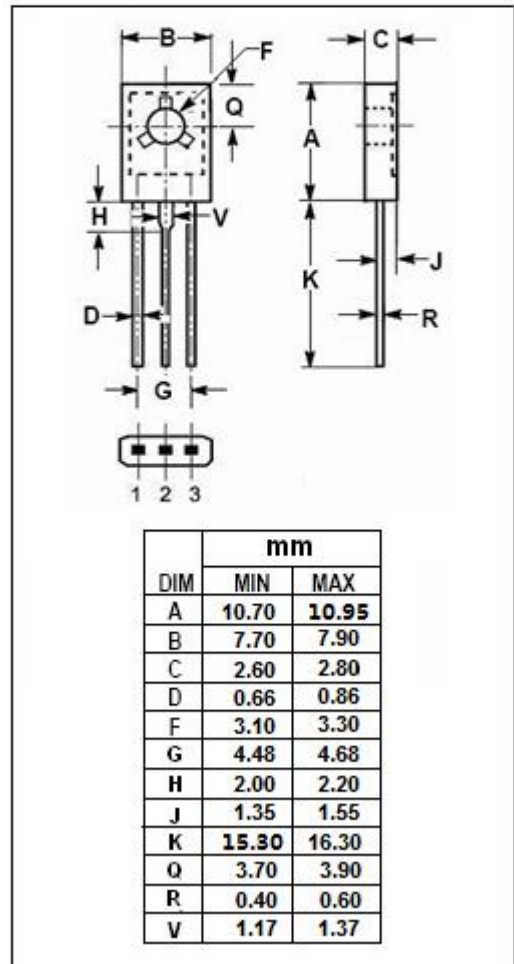
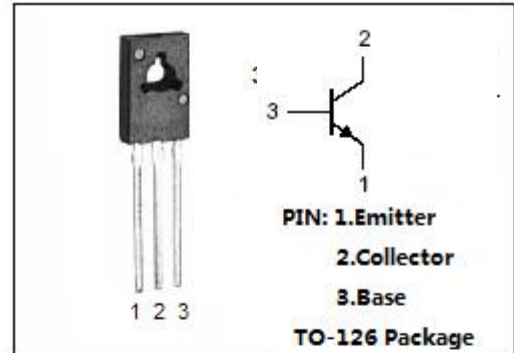
- High Collector Current- $I_C = 1.5A$
- High Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 40V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	40	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	1.5	A
$I_{CP}$	Collector Current-Pulse	2	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	10	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****KT815A****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 100 μ A ; I <sub>E</sub> = 0	60			V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 1mA ; R <sub>BE</sub> = ∞	40			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 100 μ A ; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 500mA ; I <sub>B</sub> = 50mA			0.6	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 500mA ; I <sub>B</sub> = 50mA			1.2	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 60V ; I <sub>E</sub> = 0			10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V ; I <sub>C</sub> = 0			10	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 5V	40		275	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 500mA ; V <sub>CE</sub> = 5V	20			

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