

**isc Silicon PNP Power Transistor**

**KSA940TU**

**DESCRIPTION**

- Collector-Emitter Breakdown Voltage  
:  $V_{(BR)CEO} = -150V(\text{Min})$
- DC Current Gain  
:  $h_{FE} = 40-140 @ I_C = -0.5A$
- Complement to Type KSC2073TU
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

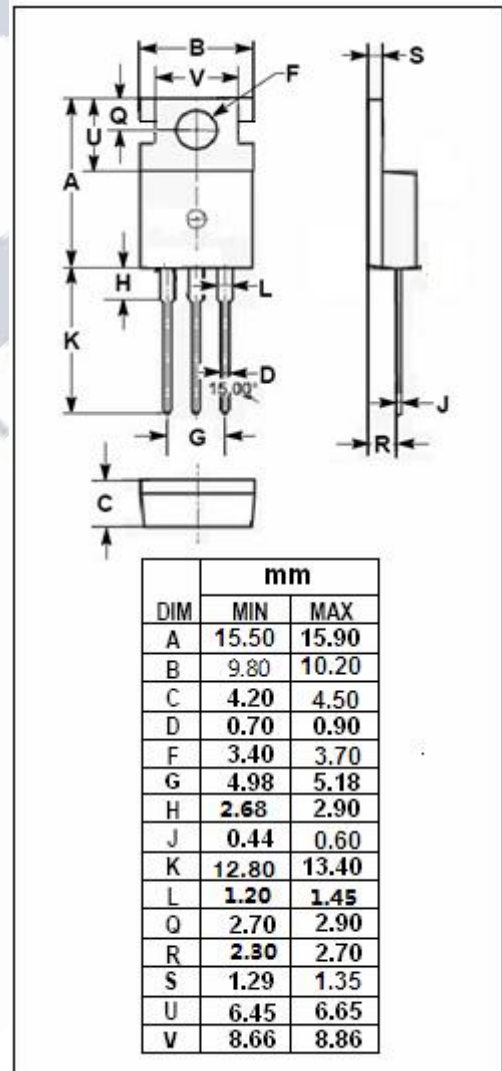
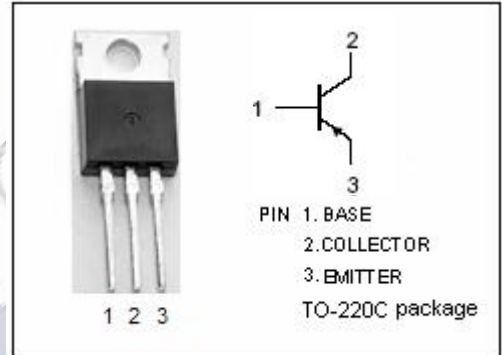
- Designed for use in general purpose power amplifier , vertical output applications.

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

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

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^\circ C/W$



**isc Silicon PNP Power Transistor****KSA940TU****ELECTRICAL CHARACTERISTICS****T<sub>c</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA ; I <sub>B</sub> = 0	-150			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA ; I <sub>E</sub> = 0	-150			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA ; I <sub>C</sub> = 0	-5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -0.5A ; I <sub>B</sub> = -50mA			-1.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -10V			-0.85	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -120V ; 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</sub>	DC Current Gain	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -10V	40		140	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -10V ; f <sub>test</sub> = 1MHz		4		MHZ