

isc Silicon PNP Power Transistor
KSB1015
DESCRIPTION

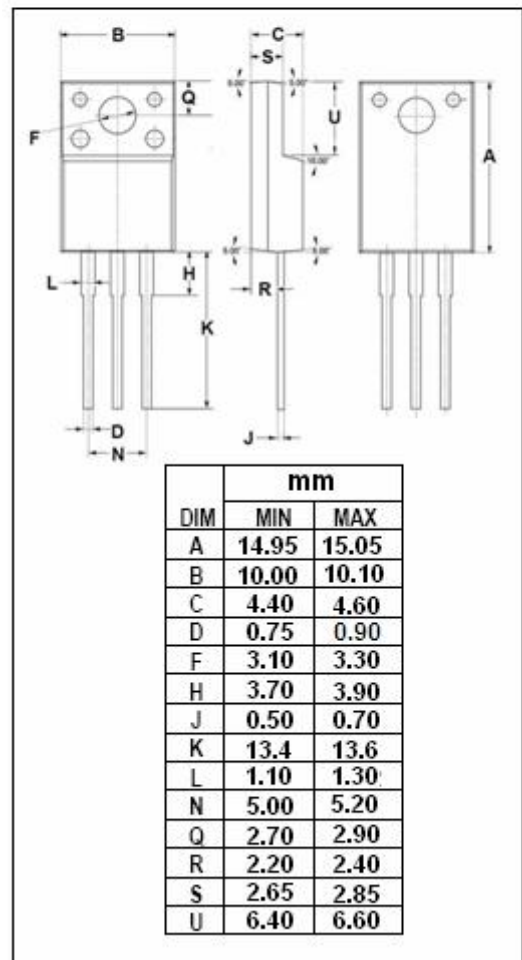
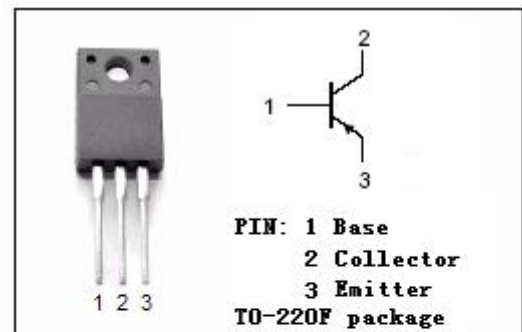
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.7 \text{ V(Max)} @ I_C = -3\text{A}$
- Good Linearity of h_{FE}
- Complement to Type KSD1406
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency 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	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-3	A
I_B	Base Current-Continuous	-0.5	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	25	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**KSB1015****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -30mA; I _B = 0	-60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -0.3A			-1.7	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -0.5A; V _{CE} = -5V			-1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-100	μ A
h _{FE-1}	DC Current Gain	I _C = -0.5A; V _{CE} = -5V	60		200	
h _{FE-2}	DC Current Gain	I _C = -3A; V _{CE} = -5V	20			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		150		pF
f _T	Current-Gain—Bandwidth Product	I _C =-0.5A; V _{CE} = -5V		9		MHz

Switching times

t _{on}	Turn-on Time			0.4		μ s
t _{stg}	Storage Time	I _C = -2.0A, I _{B1} = -I _{B2} = -0.2A, V _{CC} = -30V; R _L = 15 Ω		1.7		μ s
t _f	Fall Time			0.5		μ s

◆ **h_{FE-1} Classifications**

O	Y
60-120	100-200

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