

isc Silicon NPN Power Transistor

KSD794A

DESCRIPTION

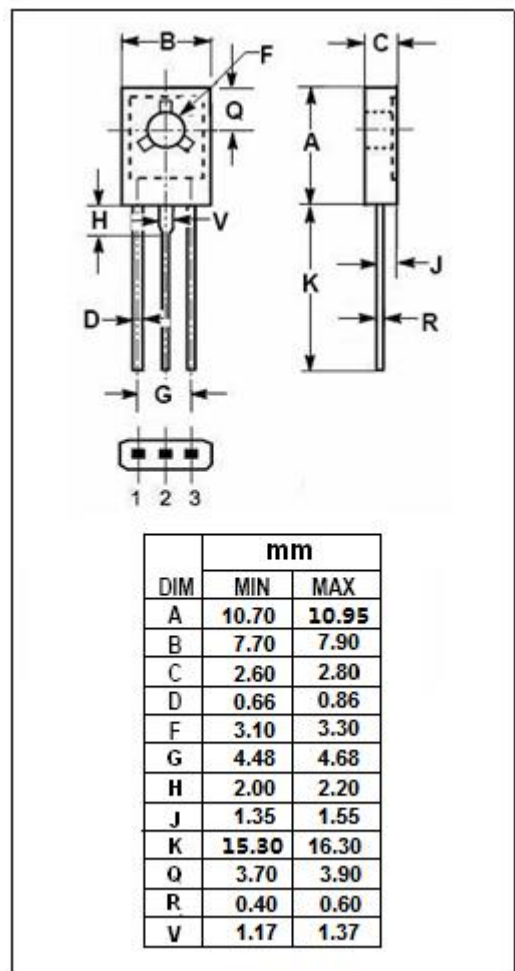
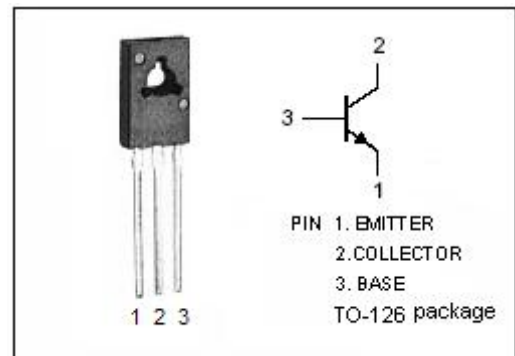
- High Collector Current $-I_C = 3A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 45V(\text{Min})$
- Complement to Type KSB744A
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in audio frequency amplifier.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CP}	Collector Current-Pulse	5	A
I_B	Base Current-Continuous	0.6	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**KSD794A****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	$I_C = 1.5\text{A}; I_B = 0.15\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 1.5\text{A}; I_B = 0.15\text{A}$			2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 45\text{V}; I_E = 0$			1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 3\text{V}; I_C = 0$			1.0	μA
h_{FE-1}	DC Current Gain	$I_C = 20\text{mA}; V_{CE} = 5\text{V}$	30			
h_{FE-2}	DC Current Gain	$I_C = 0.5\text{A}; V_{CE} = 5\text{V}$	60		320	
f_T	Current-Gain—Bandwidth Product	$I_C = 0.1\text{A}; V_{CE} = 5\text{V}$		60		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = 10\text{V}, f_{test} = 1\text{MHz}$		40		pF

◆ h_{FE-2} Classifications

R	O	Y
60-120	100-200	160-320

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