

**DESCRIPTION**

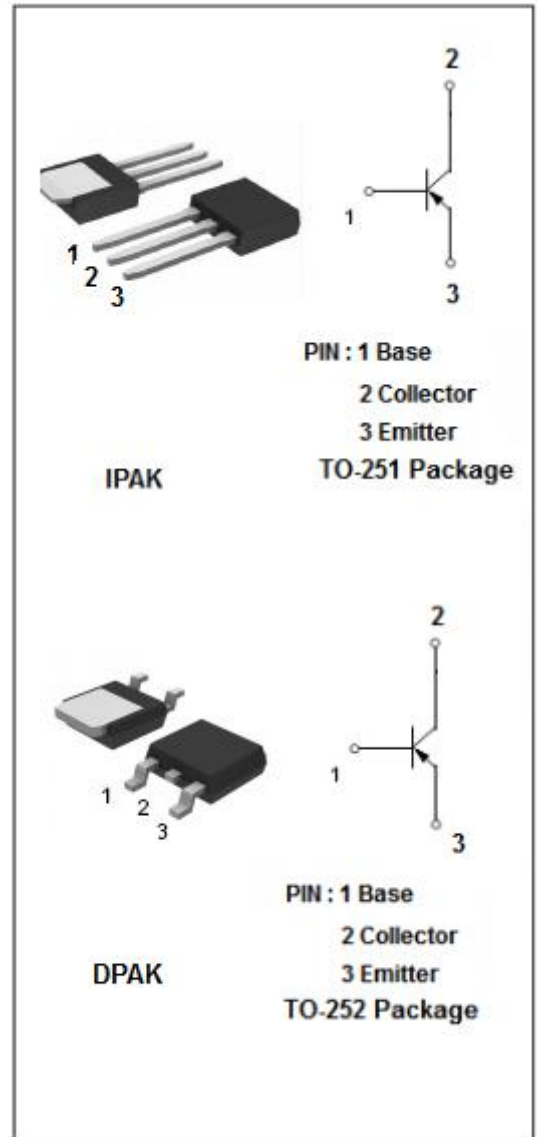
- Lead formed for surface mount applications(NO suffix)
- Straight lead(IPAK, “—I” suffix)
- Electrically similar to popular TIP42C
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- General purpose amplifier
- Low speed switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-6	A
$P_C$	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.75	W
$P_C$	Total Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistor****KSH42C****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

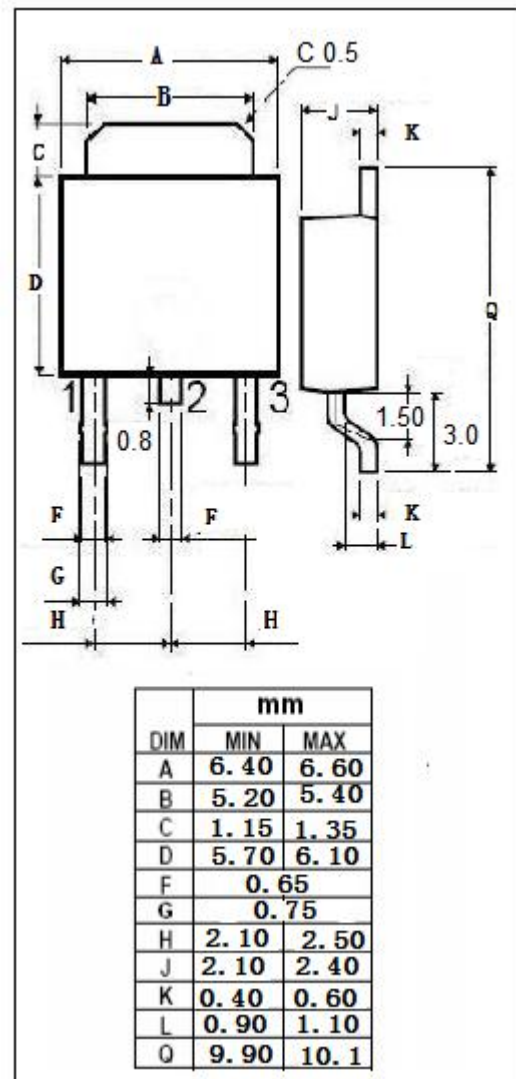
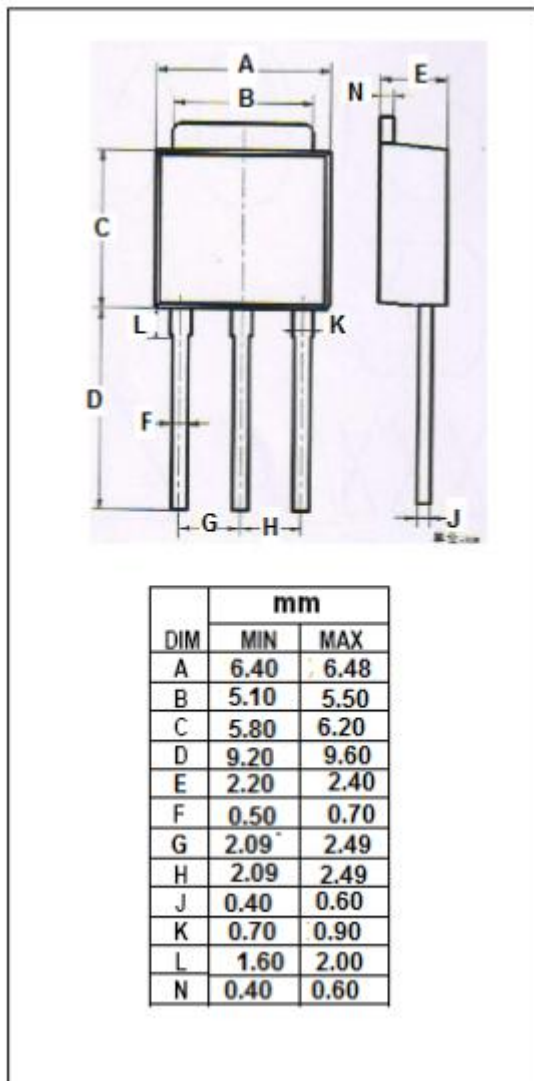
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V <sub>(BR)CEO</sub> *	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -30mA; I <sub>B</sub> = 0	-100			V
V <sub>CE(sat)</sub> *	Collector-Emitter Saturation Voltage	I <sub>C</sub> =- 6A; I <sub>B</sub> =- 600mA			-1.5	V
V <sub>BE(on)</sub> *	Base-Emitter On Voltage	I <sub>C</sub> =- 6A; V <sub>CE</sub> =-4V			-2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V; I <sub>E</sub> = 0			-10	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> =- 5V; I <sub>C</sub> = 0			-0.5	mA
h <sub>FE1</sub> *	DC Current Gain	I <sub>C</sub> =- 0.3A; V <sub>CE</sub> = -4V	30			
h <sub>FE2</sub> *	DC Current Gain	I <sub>C</sub> = -3A; V <sub>CE</sub> = -4V	15		75	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -10V	3			MHz

\*:Pulse test PW≤300us,duty cycle≤2%

## isc Silicon PNP Power Transistor

KSH42C

## Outline Drawing



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