

isc Silicon NPN Power Transistor

KSH44H11I

DESCRIPTION

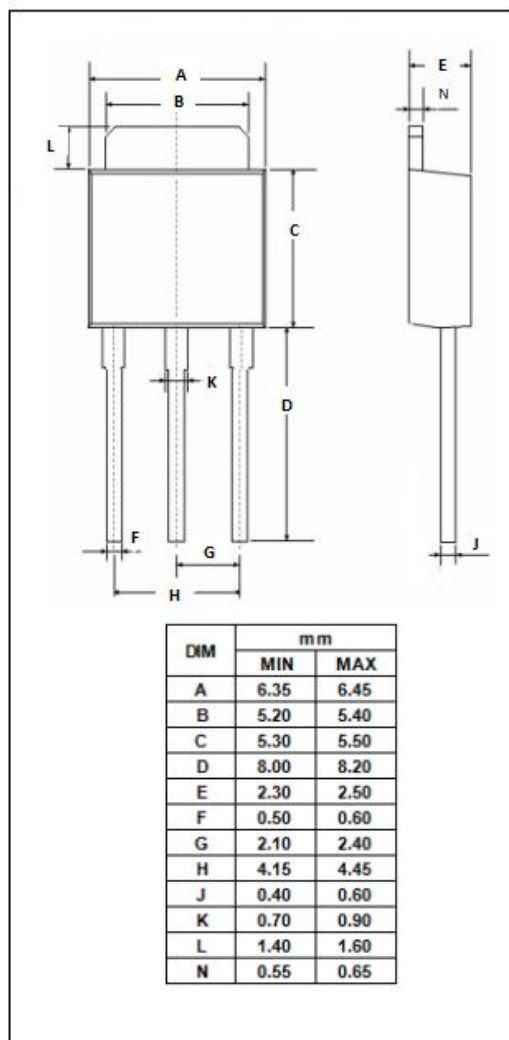
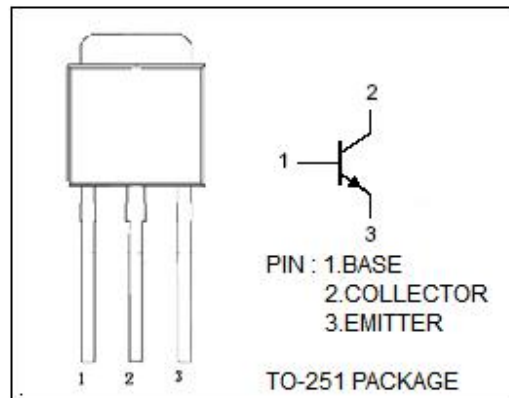
- Straight lead(IPAK, “-I” suffix)
- Electrically similar to popular KSE44H
- Fast switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulators
- Power amplifier
- Converters

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	8	A
I_{CP}	Collector Current-Pulse	16	A
P_C	Total Power Dissipation @ $T_a=25^{\circ}\text{C}$	1.75	W
	Total Power Dissipation @ $T_C=25^{\circ}\text{C}$	20	
T_J	MAX.Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$



isc Silicon NPN Power Transistor**KSH44H11I****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	80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =8A; I _B = 400mA			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C =8A; I _B = 800mA			1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 80V; I _E = 0			10	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			50	uA
h _{FE1}	DC Current Gain	I _C = 2A; V _{CE} = 1V	60			
h _{FE2}	DC Current Gain	I _C = 4A; V _{CE} = 1V	40			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		50		MHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V, f _{test} = 1MHz		130		pF

*:Pulse test PW≤300us,duty cycle≤2%