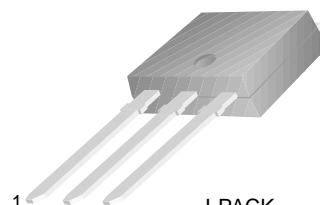


KSA1241

KSA1241

Power Amplifier Applications

- Low Collector-Emitter Saturation Voltage
- Complement to KSC3076



I-PACK
1. Base 2. Collector 3. Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	- 55	V
V_{CEO}	Collector-Emitter Voltage	- 50	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_B	Base Current	- 1	A
I_C	Collector Current	- 2	A
P_C	Collector Dissipation ($T_a=25^\circ\text{C}$)	1	W
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	10	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

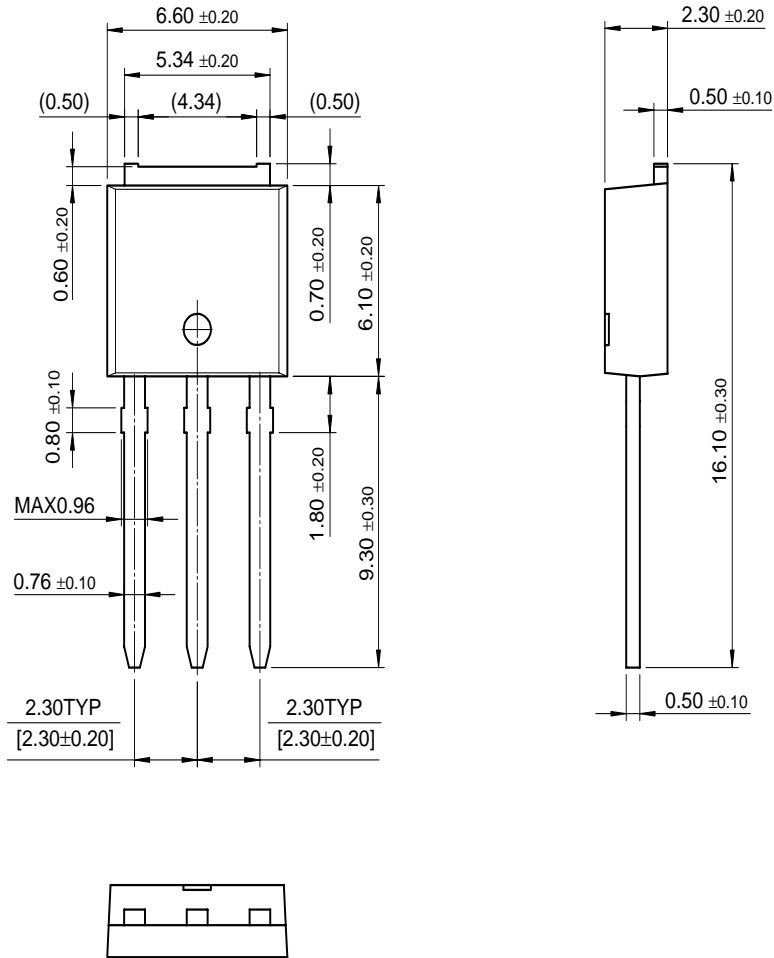
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = - 10\text{mA}, I_B = 0$	- 50			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = - 50\text{V}, I_E = 0$			- 1	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = - 5\text{V}, I_C = 0$			- 1	μA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE} = - 2\text{V}, I_C = - 0.5\text{A}$ $V_{CE} = - 2\text{V}, I_C = - 1.5\text{A}$	70 40		240	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = - 1\text{A}, I_B = - 0.05\text{A}$			- 0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = - 1\text{A}, I_B = - 0.05\text{A}$			- 1.2	V
f_T	Current Gain Bandwidth Product	$V_{CE} = - 2\text{V}, I_C = - 0.5\text{A}$		100		MHz
C_{ob}	Output Capacitance	$V_{CB} = - 10\text{V}, f = 1\text{MHz}$		40		pF
t_{ON}	Turn ON Time	$V_{CC} = - 30, I_C = - 1\text{A}$		0.1		μs
t_{STG}	Storage Time	$I_{B1} = - I_{B2} = - 0.05\text{A}$		1		μs
t_F	Fall Time	$R_L = 30\Omega$		0.1		μs

h_{FE} Classification

Classification	O	Y
h_{FE1}	70 ~ 140	120 ~ 240

Package Dimensions

I-PAK



Dimensions in Millimeters

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FACT™	QFET™	
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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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