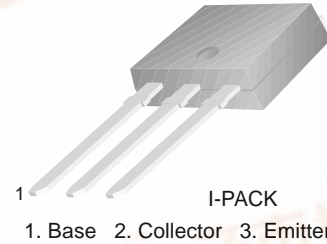




KSA1241

Power Amplifier Applications

- Low Collector-Emitter Saturation Voltage
- Complement to KSC3076



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}	DC Current Gain	$V_{CE} = - 2\text{V}, I_C = - 0.5\text{A}$	70		240	
h_{FE2}		$V_{CE} = - 2\text{V}, I_C = - 1.5\text{A}$	40			
$V_{CE(sat)}$	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

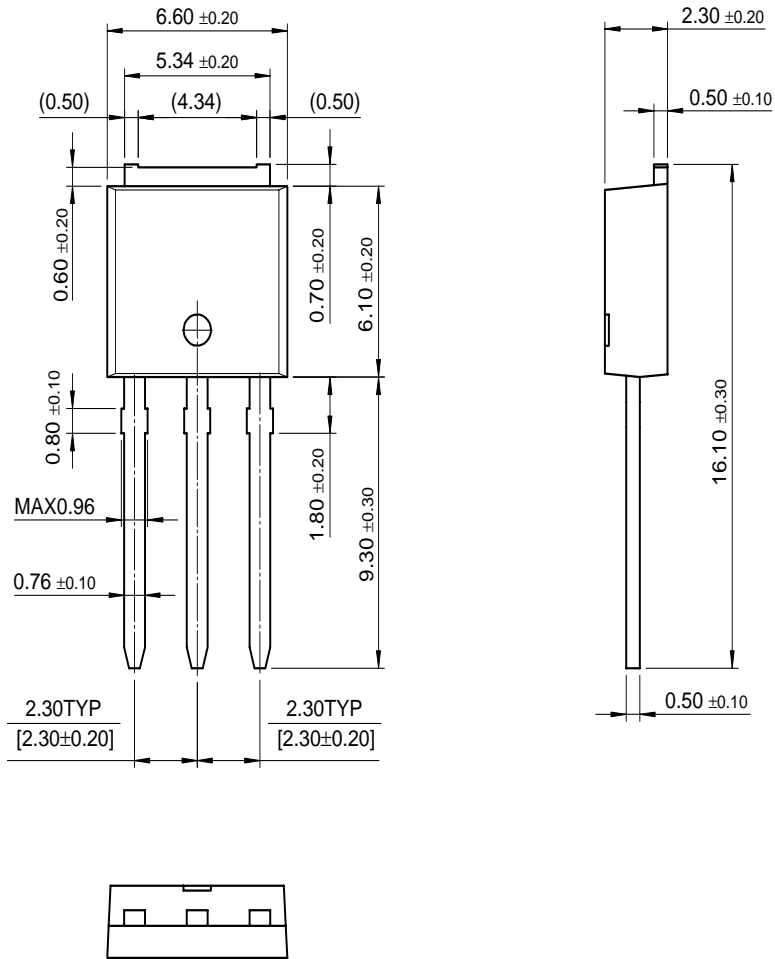
h_{FE} Classification

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



Package Demensions

I-PAK



Dimensions in Millimeters

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