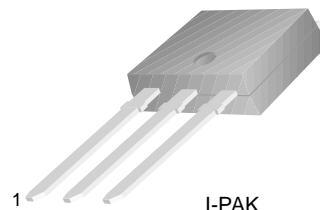


# KSA1242

KSA1242

## Medium Power Amplifier Camera Flash Applications

- $h_{FE} = 100\sim 320$  ( $V_{CE} = -2V$ ,  $I_C = -0.5V$ )
- $h_{FE} = 70$  (Min.) ( $V_{CE} = -2V$ ,  $I_C = -4A$ )
- Low Saturation Voltage:  $V_{CE(sat)} = -1V$  (Max.)



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

## PNP Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Ratings	Units
$V_{CBO}$	Collector-Base Voltage	- 35	V
$V_{CEO}$	Collector-Emitter Voltage	- 20	V
$V_{EBO}$	Emitter-Base Voltage	- 8	V
$I_C$	Collector Current (DC)	- 5	A
$I_{CP}$	Collector Current (Pulse)	- 8	A
$P_C$	Collector Dissipation ( $T_C=25^\circ C$ )	10	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	- 55 ~ 150	$^\circ C$

### Electrical Characteristics $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10mA$ , $I_B = 0$	- 20			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1mA$ , $I_C = 0$	- 8			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = -35V$ , $I_E = 0$			- 100	$\mu A$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = -8V$ , $I_C = 0$			- 100	$\mu A$
$h_{FE1}$ $h_{FE2}$	DC Current Gain	$V_{CE} = -2V$ , $I_C = -0.5A$ $V_{CE} = -2V$ , $I_C = -4A$	100 70		320	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4A$ , $I_B = -0.1A$			- 1	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -2V$ , $I_C = -4A$			- 1.5	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = -2V$ , $I_C = -0.5A$		180		MHz
$C_{ob}$	Collector Output Capacitance	$V_{CB} = -10V$ , $f = 1MHz$		50		pF

### $h_{FE}$ Classification

Classification	O	Y
$h_{FE1}$	100 ~ 200	160 ~ 320

# Typical Characteristics

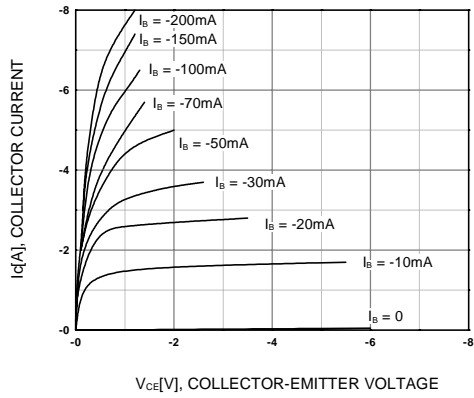


Figure 1. Static Characateristic

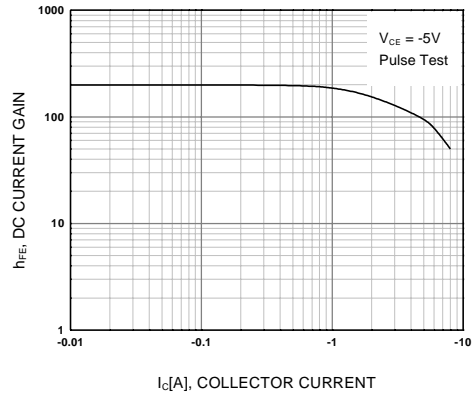


Figure 2. DC current Gain

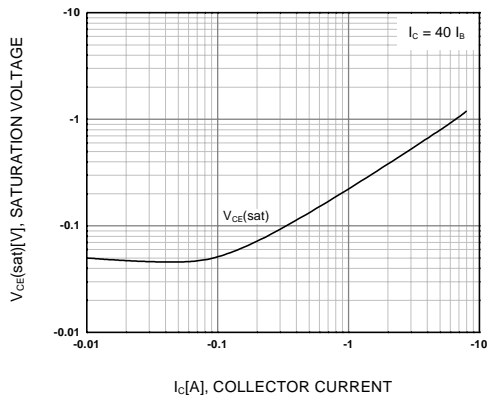


Figure 3. Collector-Emitter Saturation Voltage

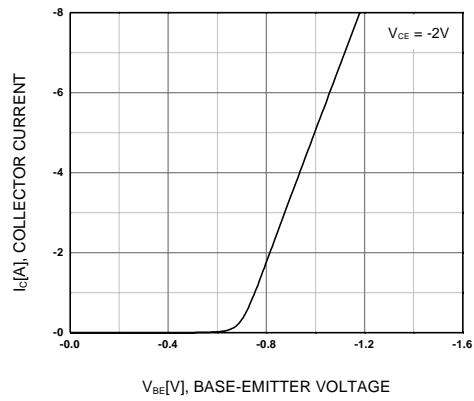


Figure 4. Base-Emitter On Voltage

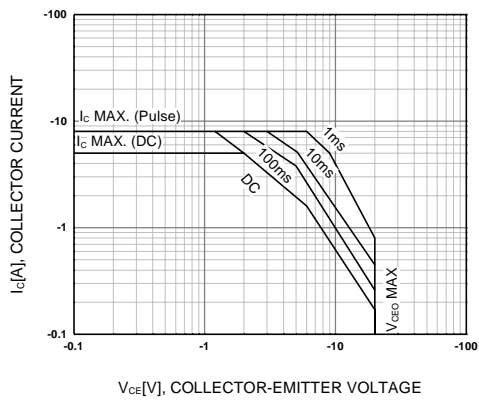


Figure 5. Safe Operating Area

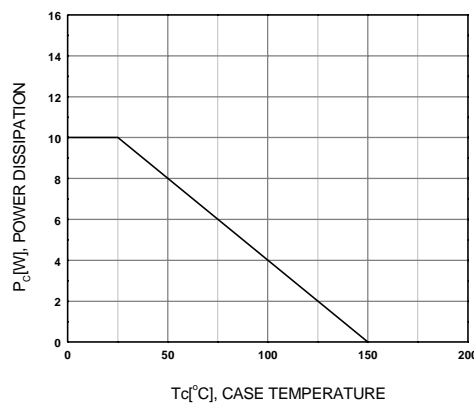
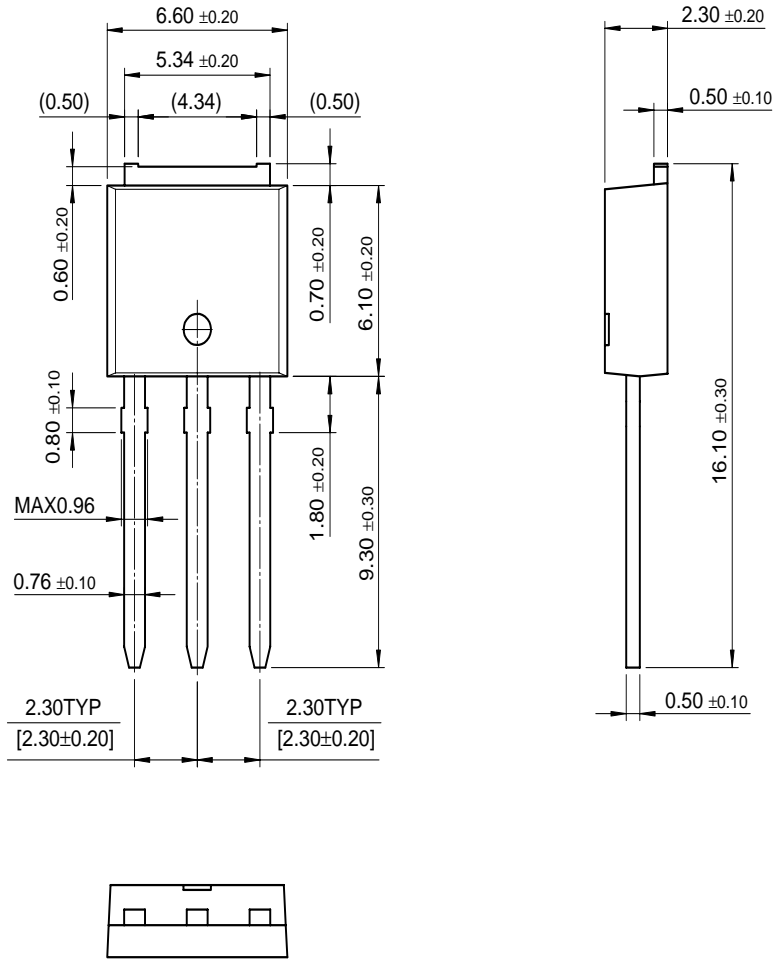


Figure 6. Power Derating

# Package Dimensions

## I-PAK



Dimensions in Millimeters

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KSA1242  
PNP Epitaxial Silicon Transistor

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