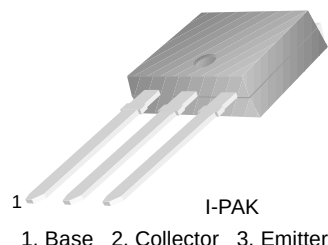


KSA1242

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.)



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	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -8V$, $I_C = 0$			- 100	μA
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

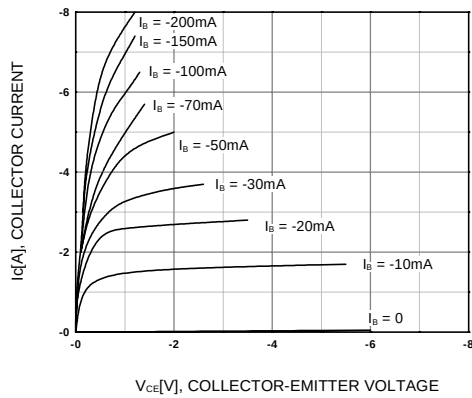


Figure 1. Static Characteristic

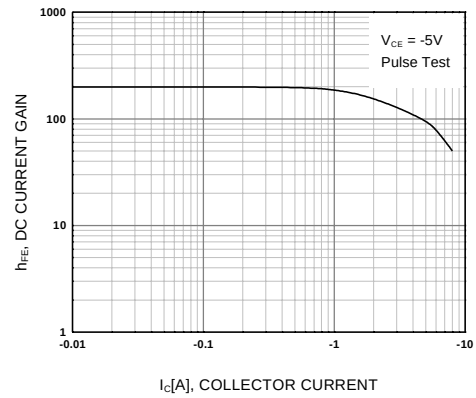


Figure 2. DC current Gain

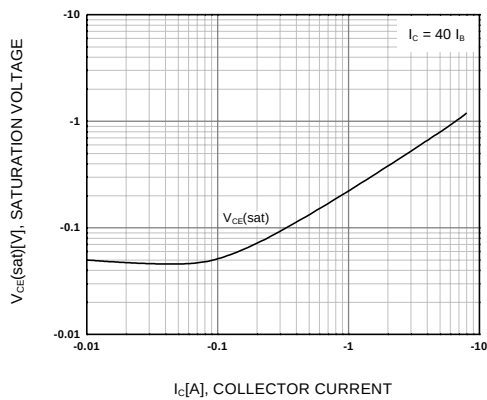


Figure 3. Collector-Emitter Saturation Voltage

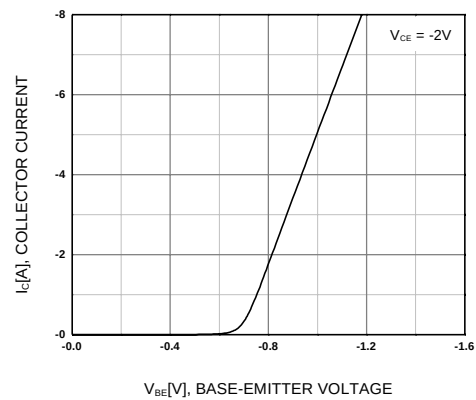


Figure 4. Base-Emitter On Voltage

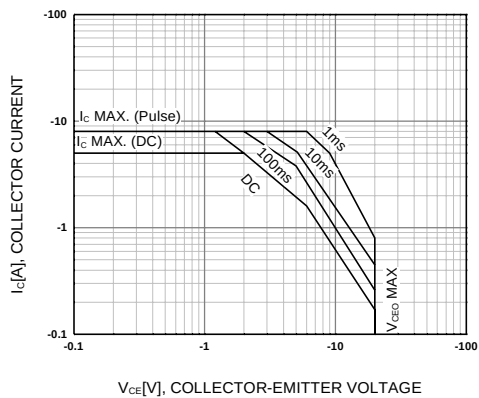


Figure 5. Safe Operating Area

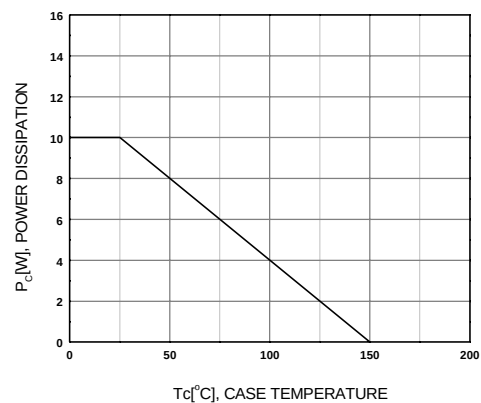
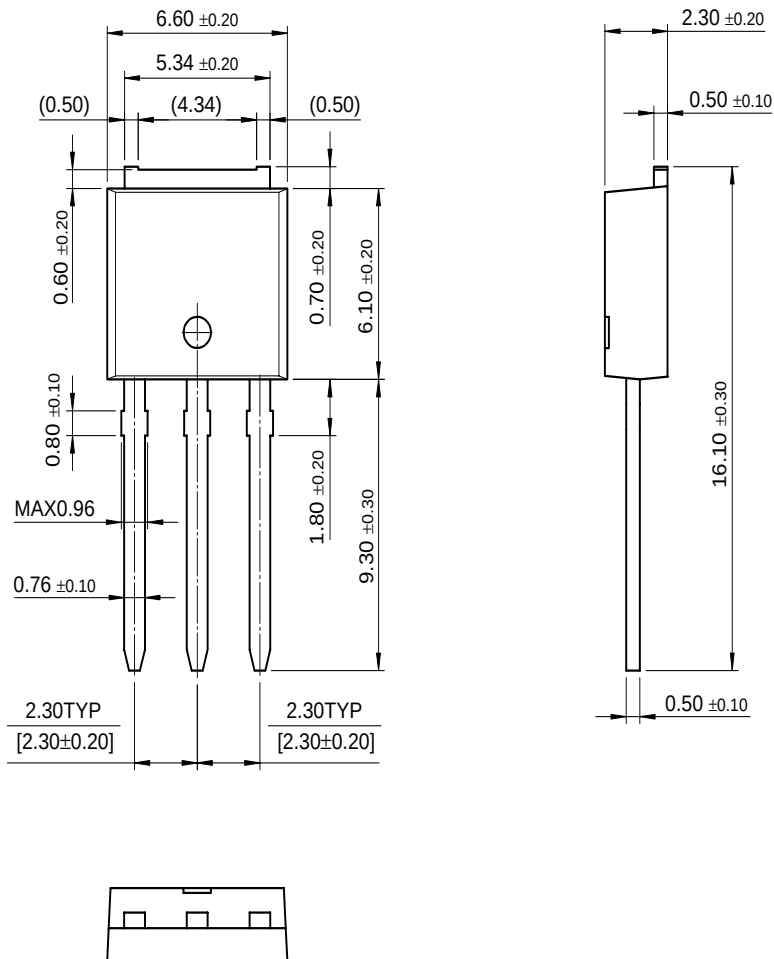


Figure 6. Power Derating

Package Dimensions

I-PAK



Dimensions in Millimeters

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