

KSA1242

Medium Power Amplifier Camera Flash Applications

- h_{FE} = 100~320 (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.)



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	Α
	Collector Current (Pulse)	- 8	А
I _{CP} P _C	Collector Dissipation (T _C =25°C)	10	W
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	- 55 ~ 150	°C

$\textbf{Electrical Characteristics} \ \textbf{T}_{\text{C}} = 25 ^{\circ} \textbf{C} \ \text{unless otherwise noted}$

Symbol	Parameter	Test Condition	Min.	Тур.	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	μΑ
I _{EBO}	Emitter Cut-off Current	$V_{EB} = -8V, I_{C} = 0$			- 100	μΑ
h _{FE1}	DC Current Gain	$V_{CE} = -2V, I_{C} = -0.5A$	100		320	
h _{FE2}		$V_{CE} = -2V, I_{C} = -4A$	70			
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	0	Υ	
h _{FE1}	100 ~ 200	160 ~ 320	

Typical Characteristics

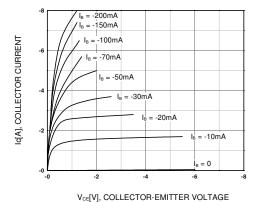


Figure 1. Static Characateristic

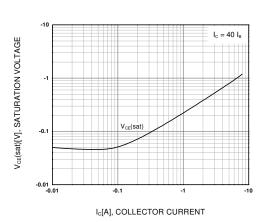


Figure 3. Collector-Emitter Saturation Voltage

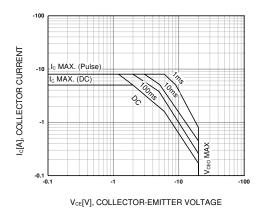


Figure 5. Safe Operating Area

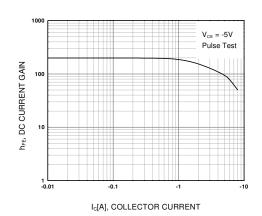


Figure 2. DC current Gain

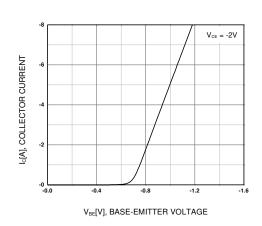


Figure 4. Base-Emitter On Voltage

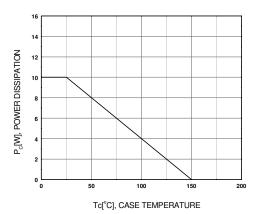
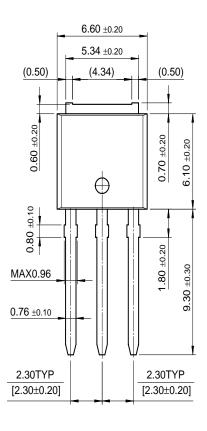


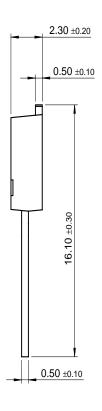
Figure 6. Power Derating

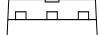
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Package Demensions

I-PAK







Dimensions in Millimeters

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