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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

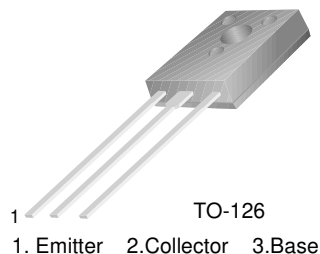


KSB1149

KSB1149

Low Collector Saturation Voltage Built-in Damper Diode at E-C

- High DC Current Gain
- High Power Dissipation : $P_C=1.3W$ ($T_a=25^\circ C$)

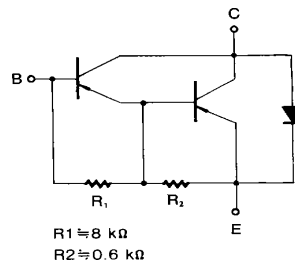


PNP Silicon Darlington Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 100	V
V_{CEO}	Collector-Emitter Voltage	- 100	V
V_{EBO}	Emitter-Base Voltage	- 8	V
I_C	Collector Current (DC)	- 3	A
I_{CP}	*Collector Current (Pulse)	- 5	A
P_C	Collector Dissipation ($T_a=25^\circ C$)	1.3	W
P_C	Collector Dissipation ($T_C=25^\circ C$)	15	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ C$

* $PW \leq 10ms$, Duty Cycle $\leq 50\%$



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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	$V_{CB} = - 100V, I_E = 0$			- 10	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = - 5V, I_C = 0$			- 2	mA
h_{FE1} h_{FE2}	* DC Current Gain	$V_{CE} = - 2V, I_C = - 1.5A$ $V_{CE} = - 2V, I_C = - 3A$	2000 1000		20000	
$V_{CE(sat)}$	* Collector-Emitter Saturation Voltage	$I_C = - 1.5A, I_B = - 1.5mA$		- 0.9	- 1.2	V
$V_{BE(sat)}$	* Base-Emitter Saturation Voltage	$I_C = - 1.5A, I_B = - 1.5mA$		- 1.5	- 2	V
t_{ON}	Turn ON Time	$V_{CC} = - 40V, I_C = - 1.5A$ $I_{B1} = - I_{B2} = - 1.5mA$ $R_L = 27\Omega$		0.5		μs
t_{STG}	Storage Time			2		μs
t_F	Fall Time			1		μs

* Pulse test: $PW \leq 350\mu s$, duty Cycles $\leq 2\%$ Pulsed

h_{FE} Classification

Classification	O	Y	G
h_{FE1}	2000 ~ 5000	4000 ~ 12000	6000 ~ 20000

Typical Characteristics

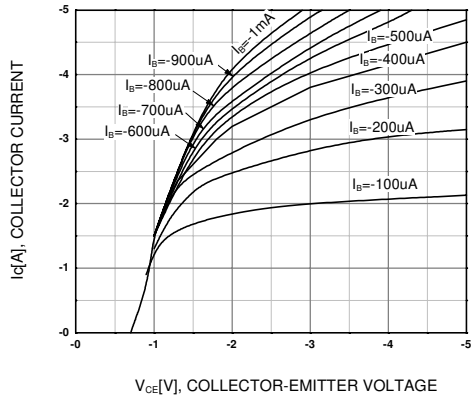


Figure 1. Static Characteristic

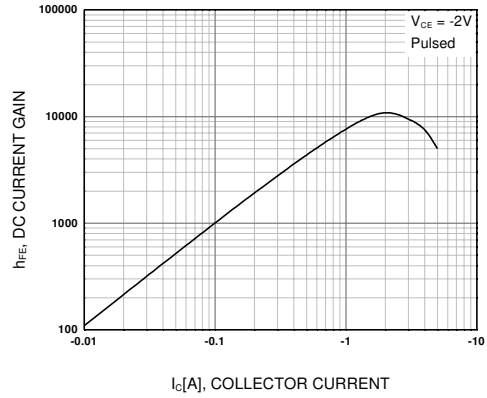


Figure 2. DC current Gain

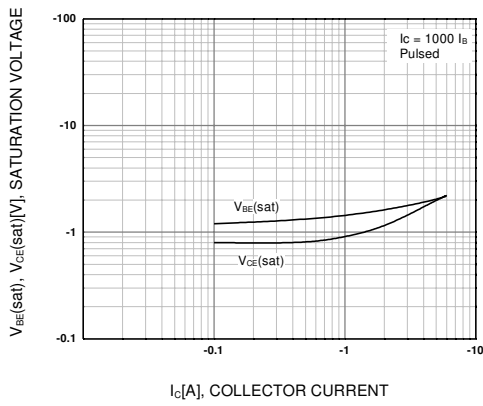


Figure 3. Collector-Emitter Saturation Voltage
Base-Emitter Saturation Voltage

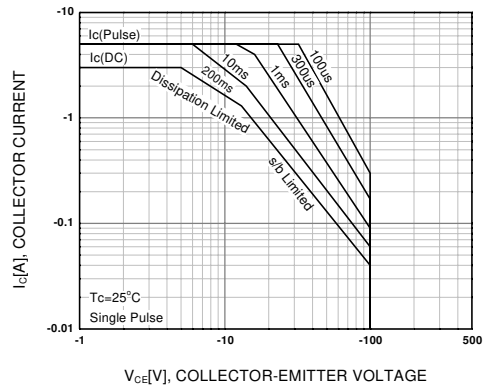


Figure 4. Forward Bias Safe Operating Area

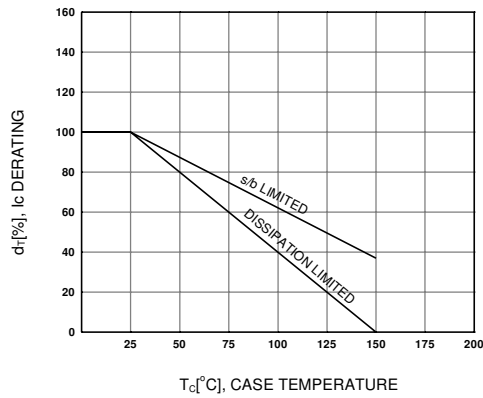


Figure 5. Derating Curve of Safe Operating Areas

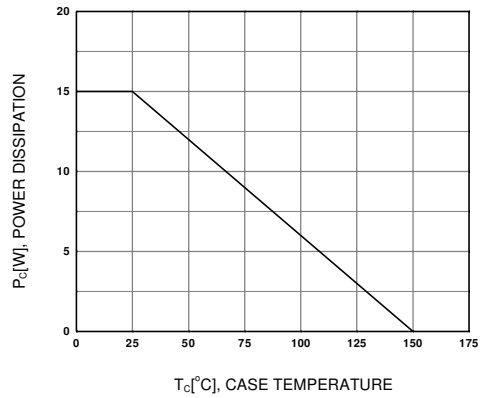
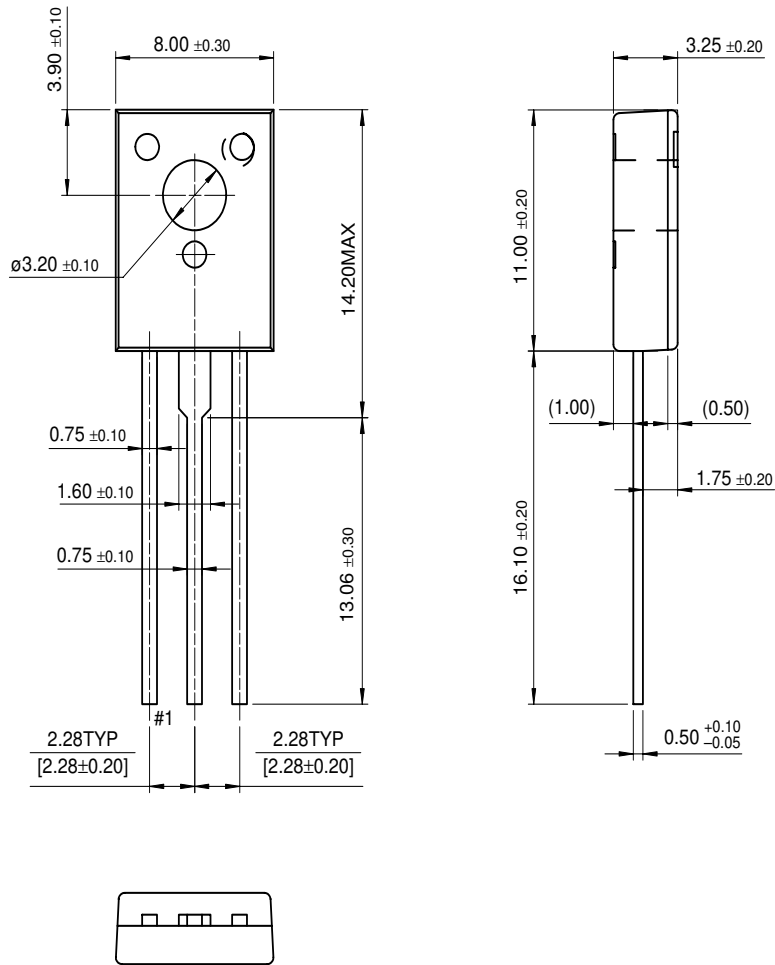


Figure 6. Power Derating

Package Dimensions

KSB1149

TO-126



Dimensions in Millimeters

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