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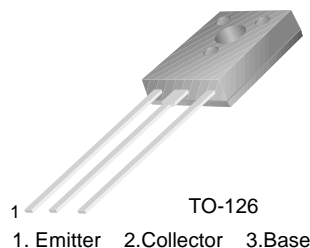
sales@integrated-circuit.com



KSE340

High Voltage General Purpose Applications

- High Collector-Emitter Breakdown Voltage
- Suitable for Transformer
- Complement to KSE350



NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	500	mA
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	20	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 65 ~ 150	$^\circ\text{C}$

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

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 1\text{mA}, I_B = 0$	300		V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 300\text{V}, I_E = 0$		100	μA
I_{EBO}	Emitter Cut-off Current	$V_{BE} = 3\text{V}, I_C = 0$		100	μA
h_{FE}	DC Current Gain	$V_{CE} = 10\text{V}, I_C = 50\text{mA}$	30	240	

Typical Characteristics

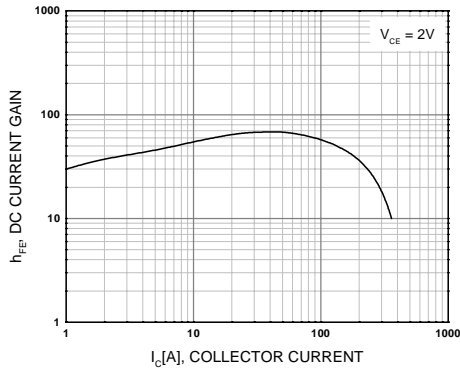


Figure 1. DC current Gain

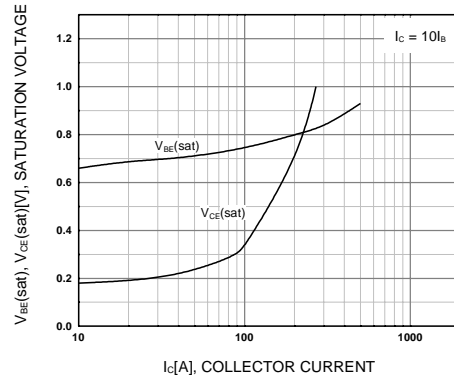


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

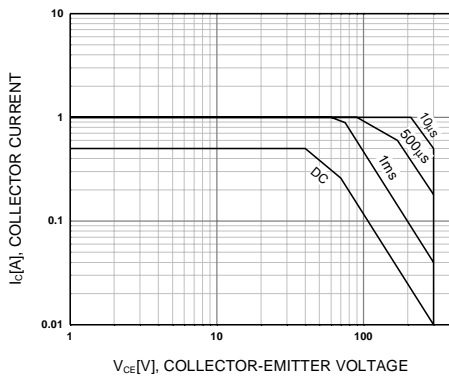


Figure 3. Safe Operating Area

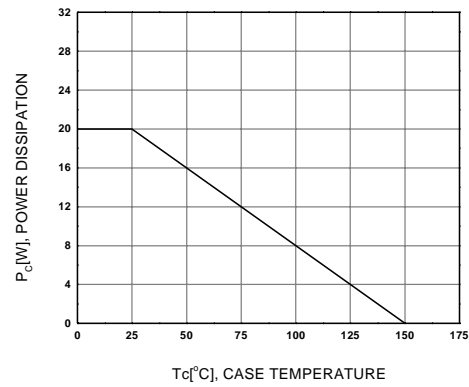
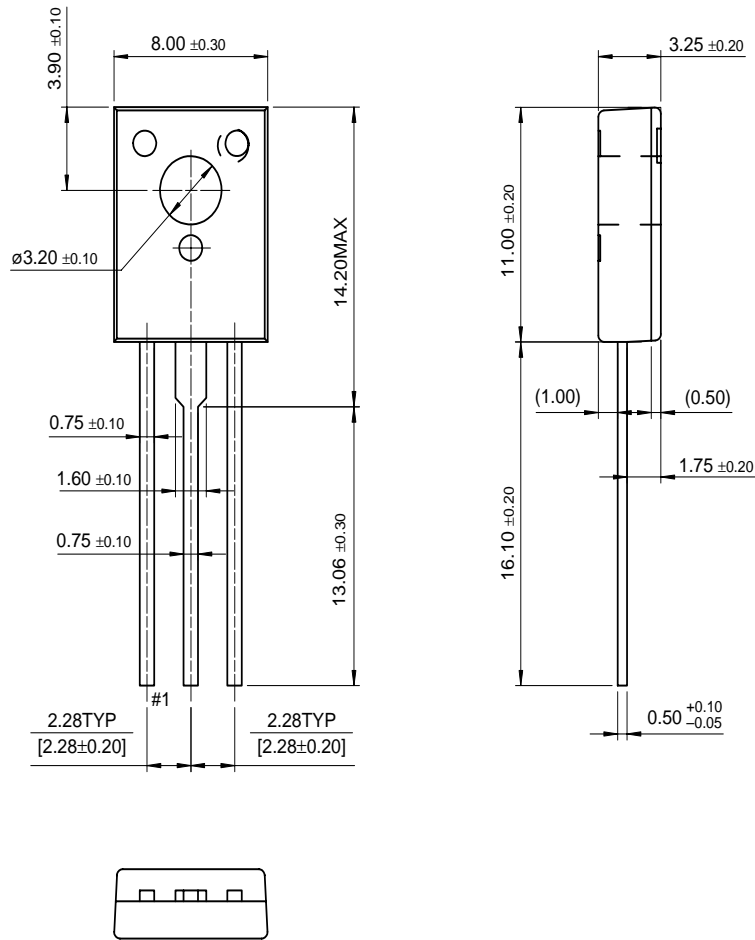


Figure 4. Power Derating

Package Dimensions

TO-126



Dimensions in Millimeters

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|----------------------|---------------|-------------|
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| Bottomless™ | ISOPANAR™ | SyncFET™ |
| CoolFET™ | MICROWIRE™ | TinyLogic™ |
| CROSSVOLT™ | POP™ | UHC™ |
| E ² CMOS™ | PowerTrench® | VCX™ |
| FACT™ | QFET™ | |
| FACT Quiet Series™ | QS™ | |
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