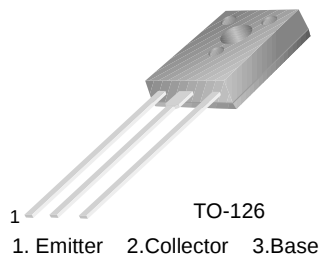


KSE340

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

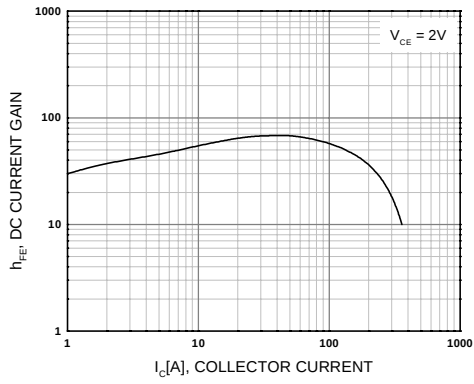


Figure 1. DC current Gain

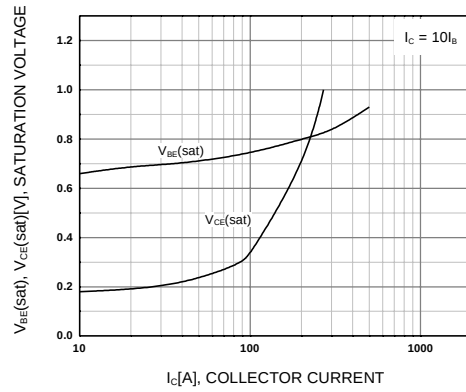


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

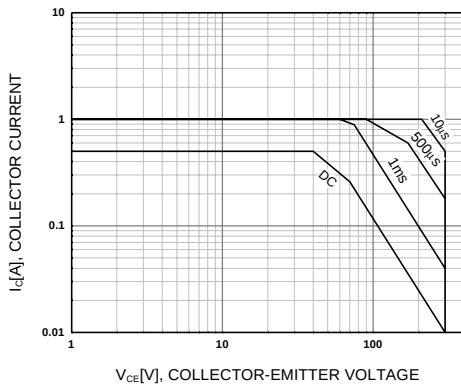


Figure 3. Safe Operating Area

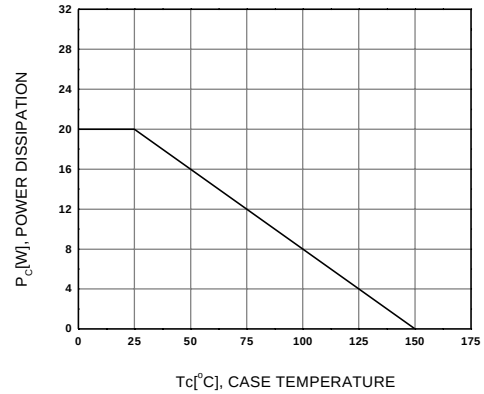


Figure 4. Power Derating

Technical drawing of a 10-pin D-sub connector. The drawing includes a front view (top), a side view (right), and a detail view of the pin (bottom). Dimensions are given in millimeters with tolerances.

Front View Dimensions:

- Overall width: 8.00 ± 0.30
- Overall height: 14.20 MAX
- Pin diameter: $\text{Ø}3.20 \pm 0.10$
- Pin spacing: 2.28 TYP [2.28 ± 0.20]
- Pin length: 13.06 ± 0.30
- Pin thickness: 0.75 ± 0.10
- Pin width: 1.60 ± 0.10
- Pin height: 0.75 ± 0.10

Side View Dimensions:

- Overall height: 11.00 ± 0.20
- Pin thickness: $0.50^{+0.10}_{-0.05}$
- Pin width: 1.75 ± 0.20
- Pin height: 1.00 (dimension line shown)
- Pin width: (0.50) (dimension line shown)

Detail View Dimensions:

- Pin diameter: $\text{Ø}3.20 \pm 0.10$
- Pin length: 13.06 ± 0.30
- Pin thickness: 0.75 ± 0.10
- Pin width: 1.60 ± 0.10
- Pin height: 0.75 ± 0.10

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