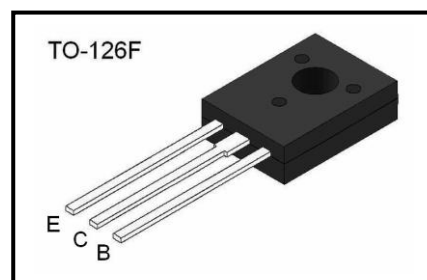


High Voltage General Purpose Applications

- High Collector-Emitter Breakdown Voltage
- Suitable for Transformer
- Complement to KSE340

**Absolute Maximum Ratings** ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-300	V
Collector-Emitter Voltage	BV_{CEO}	-300	V
Emitter-Base Voltage	BV_{EBO}	-5	V
Collector Current	I_C	-500	mA
Collector Power Dissipation ($T_C=25^{\circ}\text{C}$)	P_C	20	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C = -100\mu\text{A}$, $I_E = 0$	-300			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1\text{mA}$, $I_B = 0$	-300			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -3.0\text{V}$, $I_E = 0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			-100	μA
DC current gain	h_{FE}	$V_{CE} = -10\text{V}$, $I_C = -50\text{mA}$	30		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20\text{mA}$, $I_B = -2\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20\text{mA}$, $I_B = -2\text{mA}$			-0.9	V

Typical Characteristics

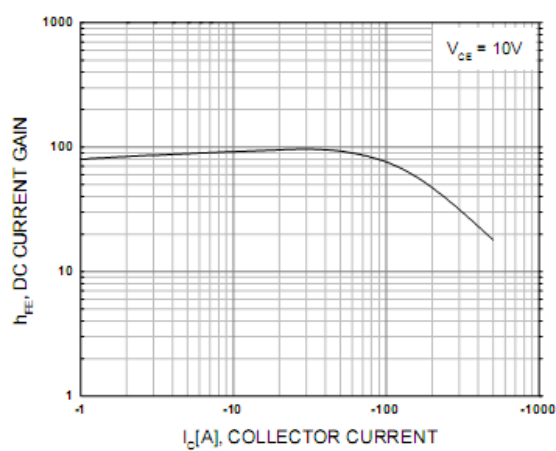


Figure 1. DC current Gain

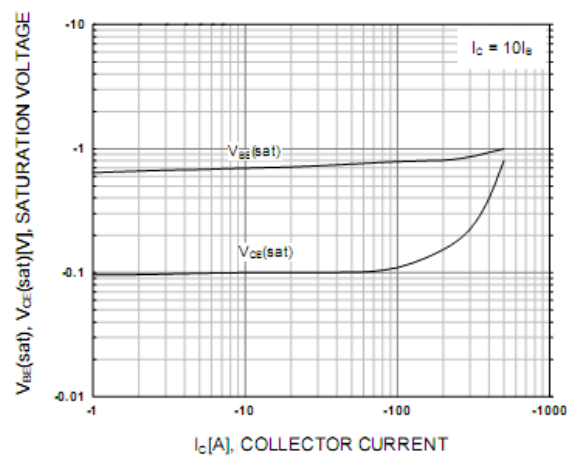


Figure 2. Base-Emitter Voltage
Collector-Emmitter Saturation Voltage

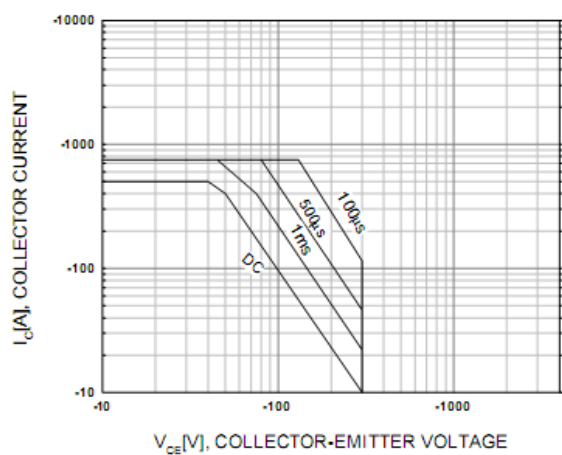
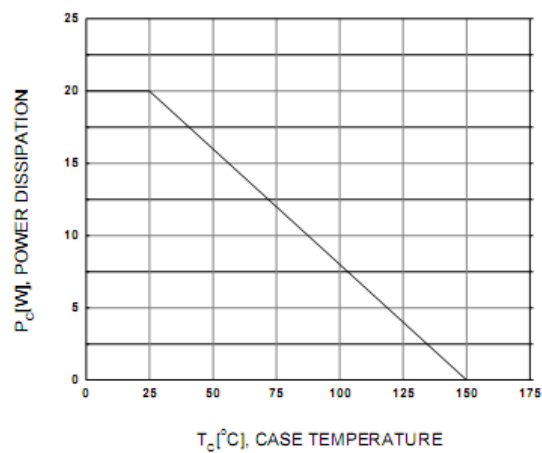


Figure 3. Safe Operating Area



4. Power Derating

Package Dimensions

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.30	0.110	0.130
A1	1.40	2.00	0.039	0.055
b	0.66	0.86	0.026	0.034
b1	1.17	1.37	0.046	0.054
c	0.30	0.50	0.012	0.020
D	7.40	7.80	0.291	0.307
E	10.00	11.00	0.417	0.433
e	2.25	2.33	0.089	0.092
e1	4.50	4.66	0.177	0.183
L	14.50	15.50	0.571	0.610
L1	1.90	2.50	0.075	0.098
Φ	3.10	3.30	0.122	0.130