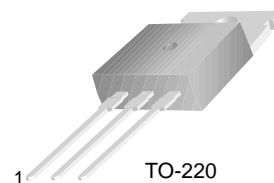


KSD401

TV Vertical Deflection Output

- Collector-Base Voltage : $V_{CBO}=200V$
- Collector Current : $I_C=2A$
- Collector Dissipation : $P_C=25W(T_C=25^\circ C)$
- Complement to KSB546



1.Base 2.Collector 3.Emitter

NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	2	A
P_C	Collector Dissipation ($T_C=25^\circ C$)	25	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ C$

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 500\mu A, I_E = 0$	200			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 10mA, I_B = 0$	150			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -500\mu A, I_C = 0$	5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 150V, I_E = 0$			50	μA
h_{FE}	DC Current Gain	$V_{CE} = 10V, I_C = 0.4A$	120		400	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 500mA, I_B = 50mA$			1	V
f_T	Current Gain Bandwidth Product	$V_{CE} = 10V, I_C = 0.4A$		5		MHz

h_{FE} Classification

Classification	Y	G
h_{FE}	120 ~ 240	200 ~ 400

Typical Characteristics

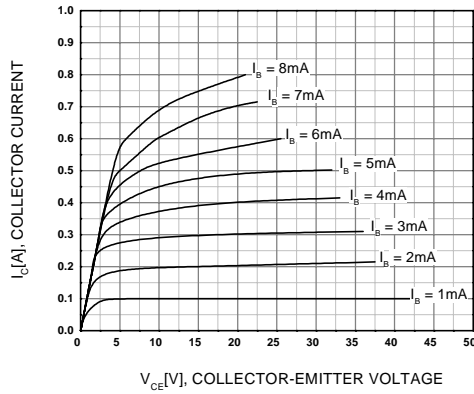


Figure 1. Static Characteristic

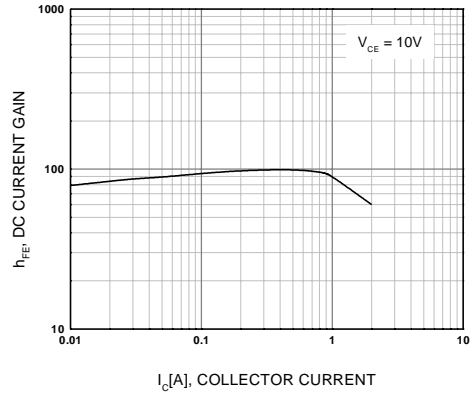


Figure 2. DC current Gain

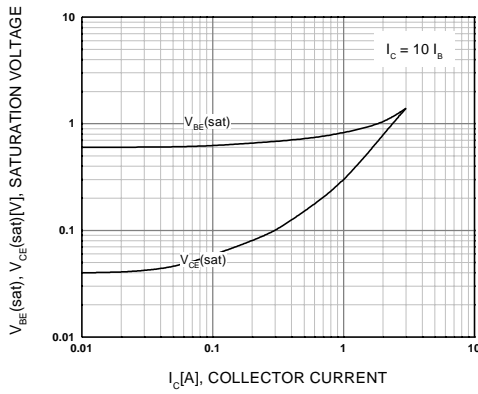


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

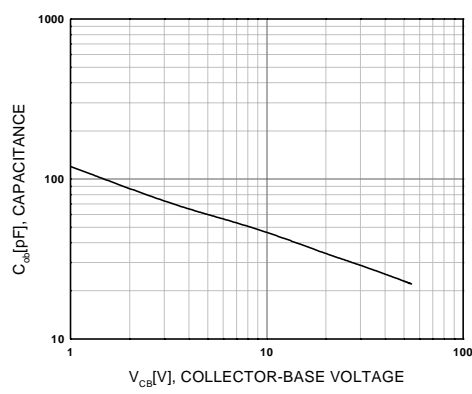


Figure 4. Collector Output Capacitance

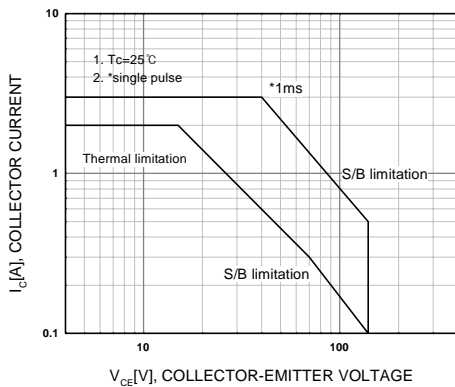


Figure 5. Safe Operating Area

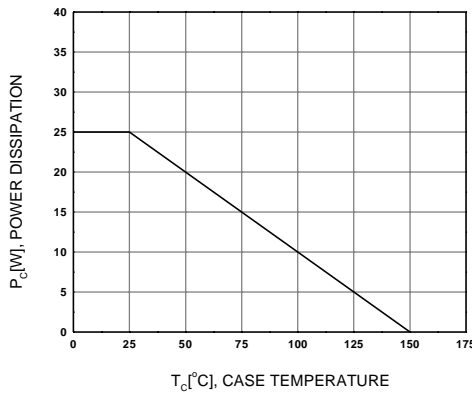
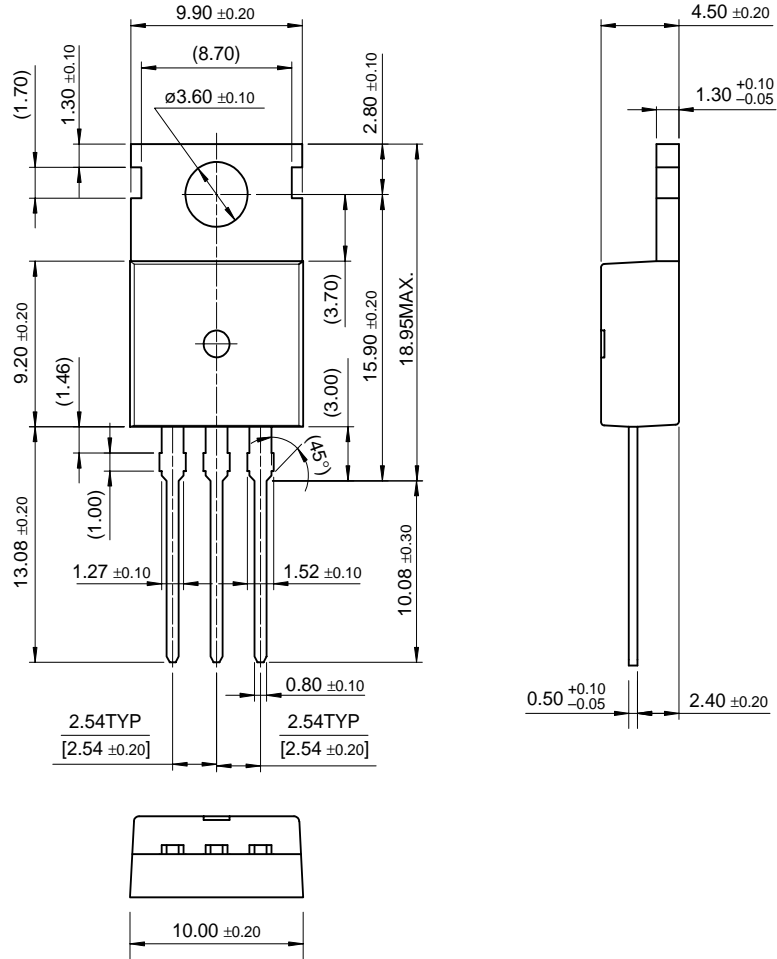


Figure 6. Power Derating

Package Dimensions

TO-220



Dimensions in Millimeters

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