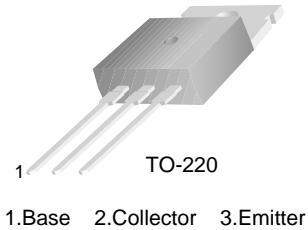


# KSC2073

## NPN Epitaxial Silicon Transistor

### Features

- TV Vertical Deflection Output
- Complement to KSA940
- Collector-Base Voltage :  $V_{CBO} = 150V$



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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	150	V
$V_{CEO}$	Collector-Emitter Voltage	150	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	1.5	A
$P_C$	Collector Dissipation ( $T_C = 25^\circ C$ )	25	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	- 55 to 150	$^\circ C$

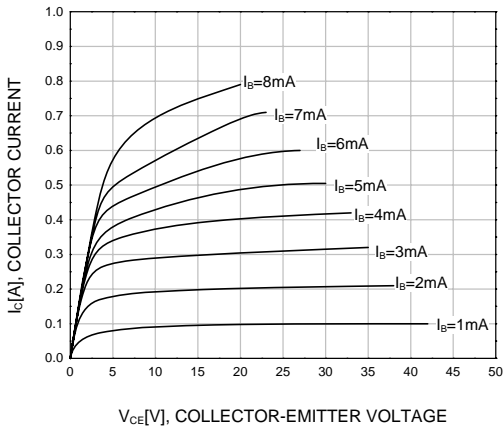
### Electrical Characteristics $T_A = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 500\mu A, I_E = 0$	150			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	$V_{CB} = 120V, I_E = 0$			10	$\mu A$
$h_{FE}$	DC Current Gain	$V_{CE} = 10V, I_C = 0.5A$	40	75	140	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 500mA, I_B = 50mA$			1	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = 10V, I_C = 0.5A$		4		MHz
$C_{ob}$	Output Capacitance	$V_{CB} = 10V, I_E = 0, f = 1MHz$		50		pF

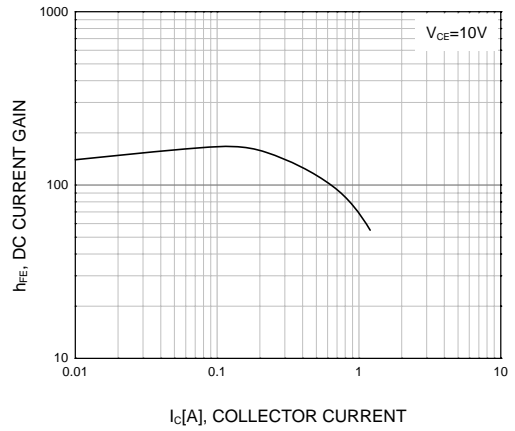
### $h_{FE}$ Classification

Classification	H1	H2
$h_{FE}$	40 ~ 80	60 ~ 125

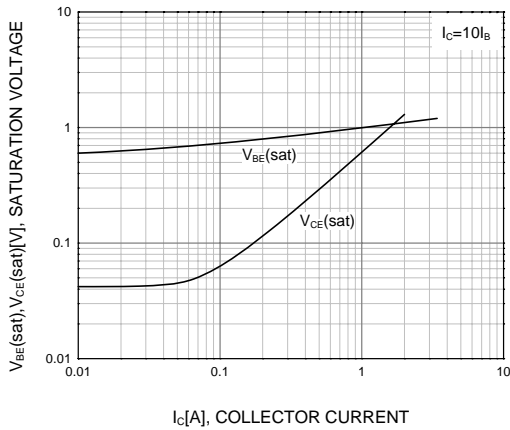
## Typical Performance Characteristics



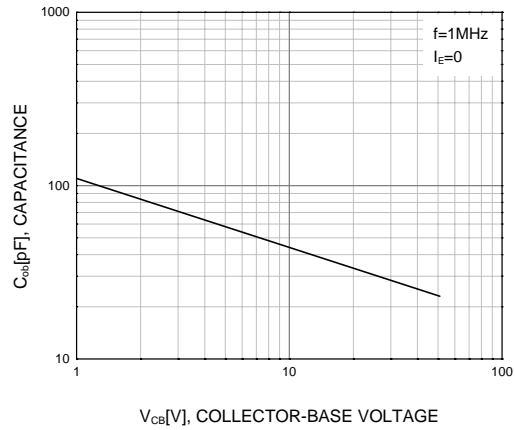
**Figure 1. Static Characteristic**



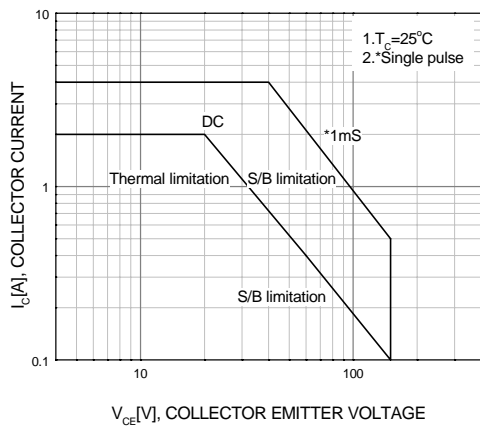
**Figure 2. DC current Gain**



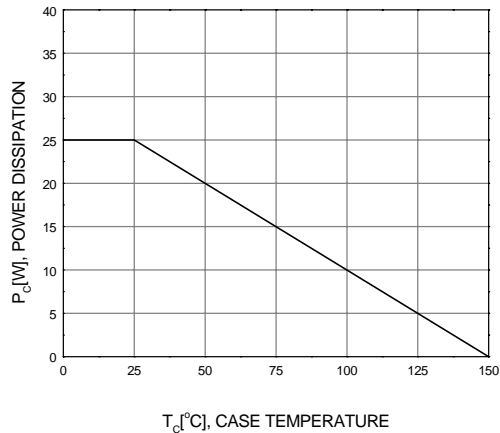
**Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Figure 4. Collector-Emitter On Voltage**



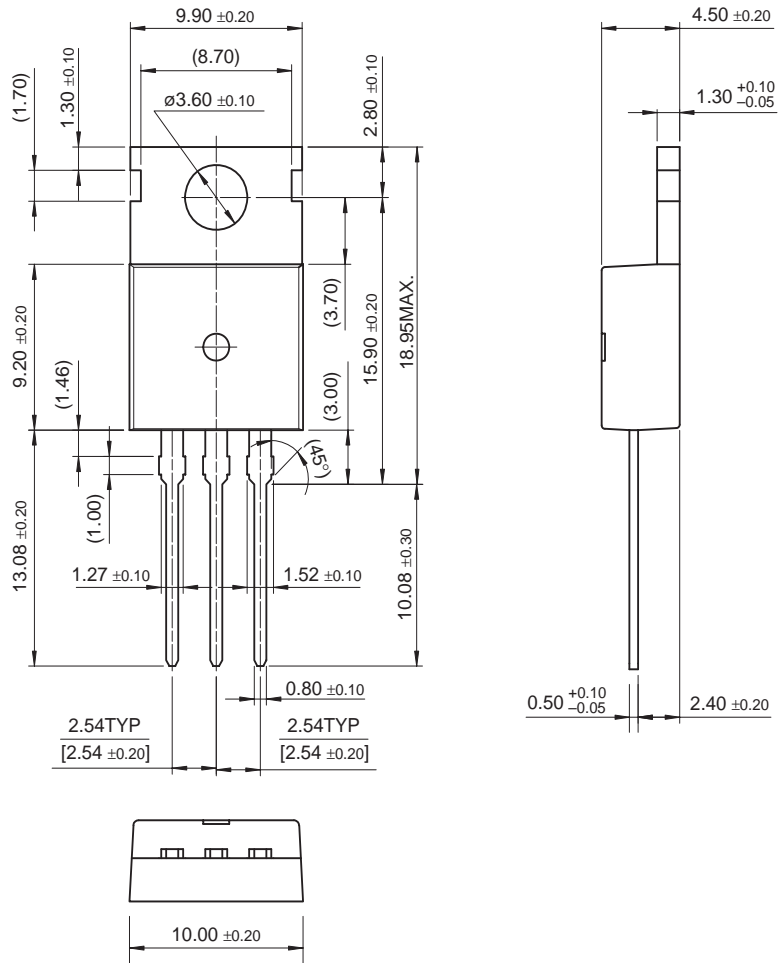
**Figure 5. Safe Operating Area**



**Figure 6. Power Derating**

Physical Dimension

TO-220







Dimensions in Millimeters



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| AX-CAP™*  | Global Power Resource <sup>SM</sup>            | PowerXS™  | TinyBoost™  |
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| Build it Now™   | Green FPS™ e-Series™                           | QFET®   | TinyCalc™   |
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| CTL™  | ISOPLANAR™                                     |  ™ | TinyPWM™  |
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| EcoSPARK®   | MicroFET™                                      | SMART START™  | TRUECURRENT®*   |
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