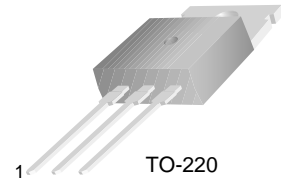


# KSC2073

## NPN Epitaxial Silicon Transistor

### Features

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



TO-220  
1.Base 2.Collector 3.Emitter

### 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

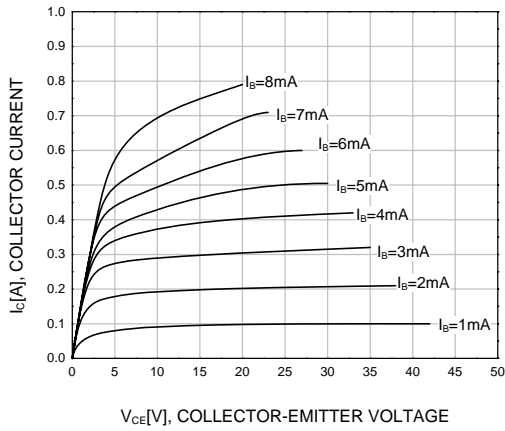


Figure 1. Static Characteristic

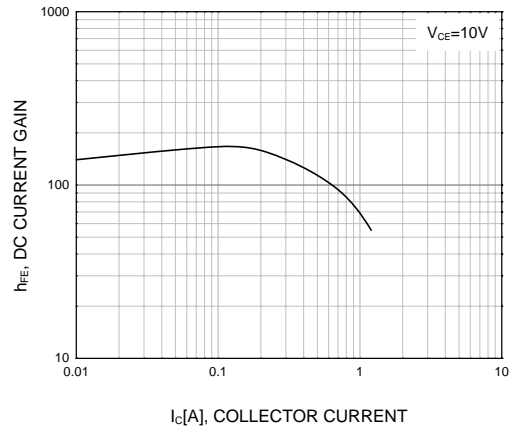


Figure 2. DC current Gain

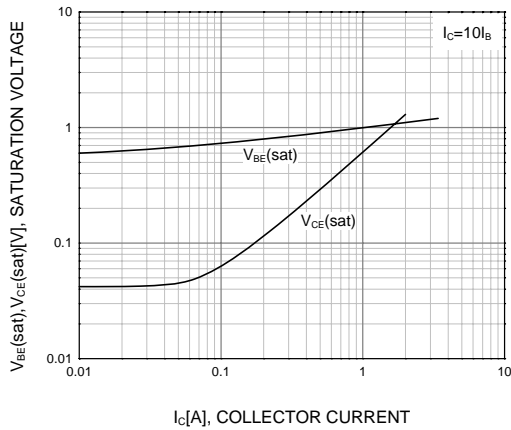


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

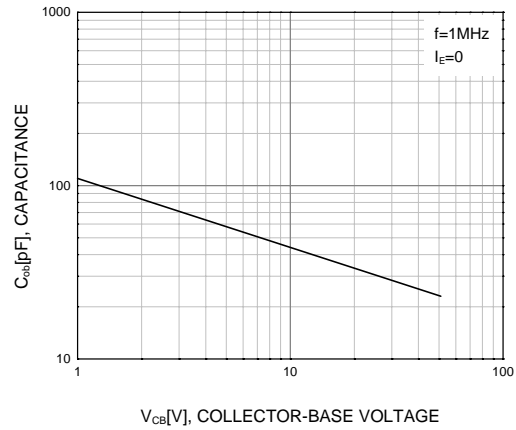


Figure 4. Collector-Emitter On Voltage

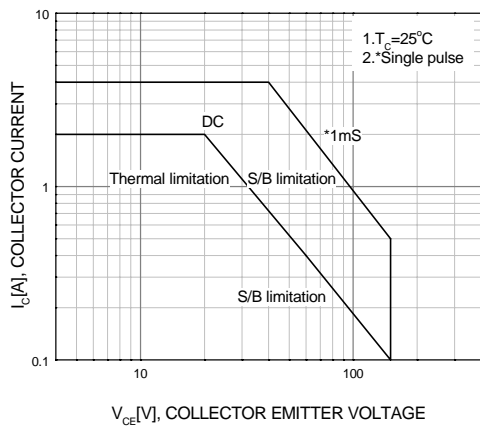


Figure 5. Safe Operating Area

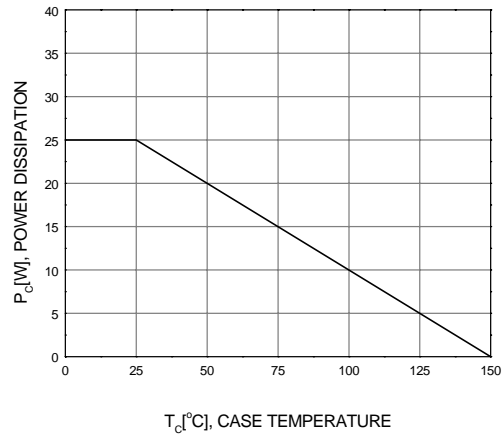
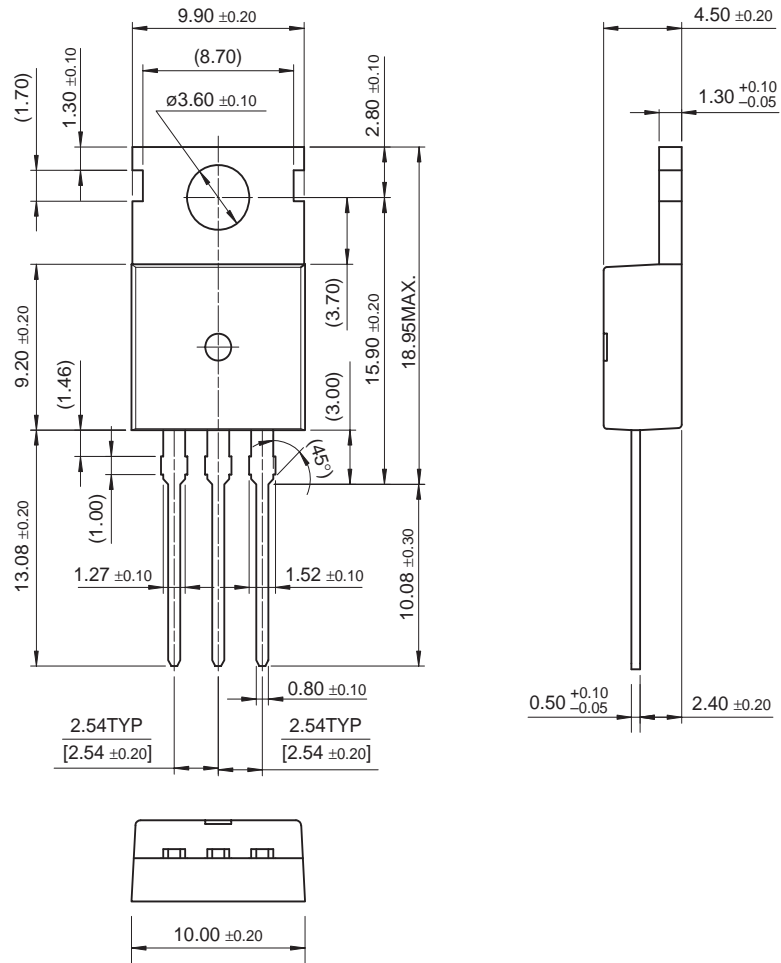


Figure 6. Power Derating

Physical Dimension

TO-220








Dimensions in Millimeters



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| Auto-SPM™                                                                                    | FRFET®                                                                            | PowerTrench®                                                                                       | franchise                                                                             |
| AX-CAP™*                                                                                     | Global Power Resource <sup>SM</sup>                                               | PowerXS™                                                                                           | TinyBoost™                                                                            |
| BitSiC®                                                                                      | Green FPS™                                                                        | Programmable Active Droop™                                                                         | TinyBuck™                                                                             |
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| FACT®                                                                                        | mWSaver™                                                                          | SuperSOT™-8                                                                                        | VCX™                                                                                  |
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| FastvCore™                                                                                   | OPTOLOGIC®                                                                        | SyncFET™                                                                                           | VoltagePlus™                                                                          |
| FETBench™                                                                                    | OPTOPLANAR®                                                                       | Sync-Lock™                                                                                         | XS™                                                                                   |
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