



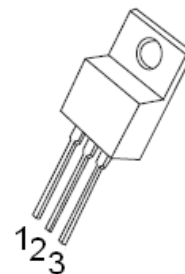
## KSC2073 NPN Epitaxial Silicon Transistor

### TV Vertical Deflection Output

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

TO-220

1. BASE
2. COLLECTOR
3. EMITTER



### Absolute Maximum Ratings $T_C=25^{\circ}C$ 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 ~ 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	$I_C = 500\mu A, I_E = 0$	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

## Typical Characteristics

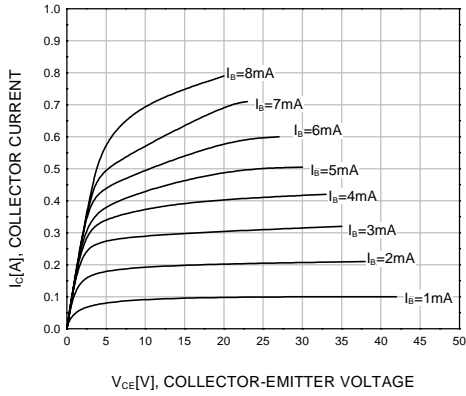


Figure 1. Static Characteristic

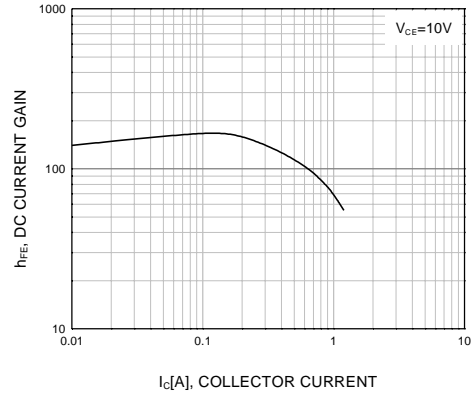


Figure 2. DC current Gain

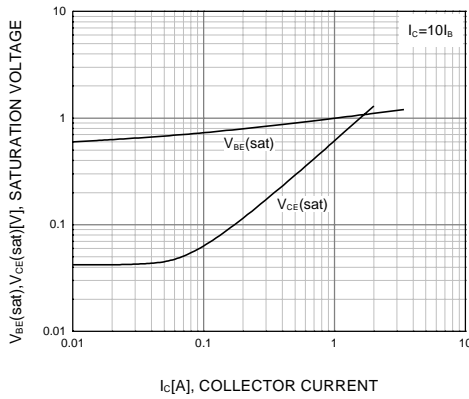


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

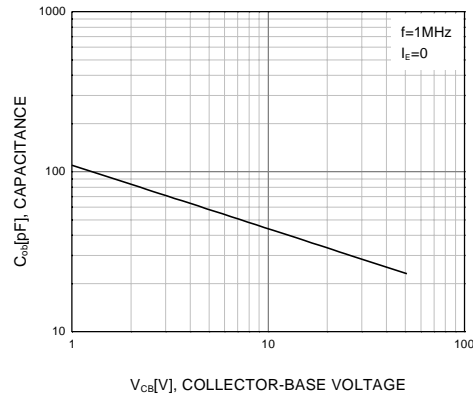


Figure 4. Collector-Emitter On Voltage

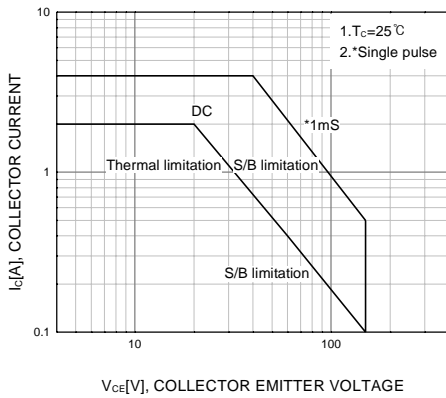


Figure 5. Safe Operating Area

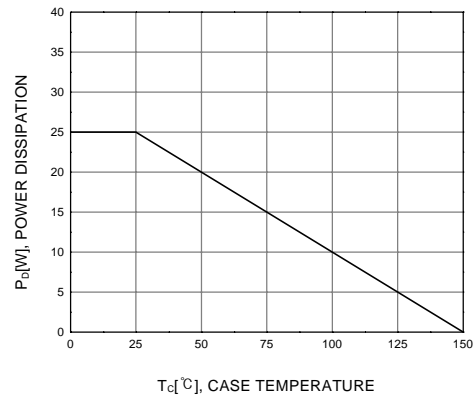
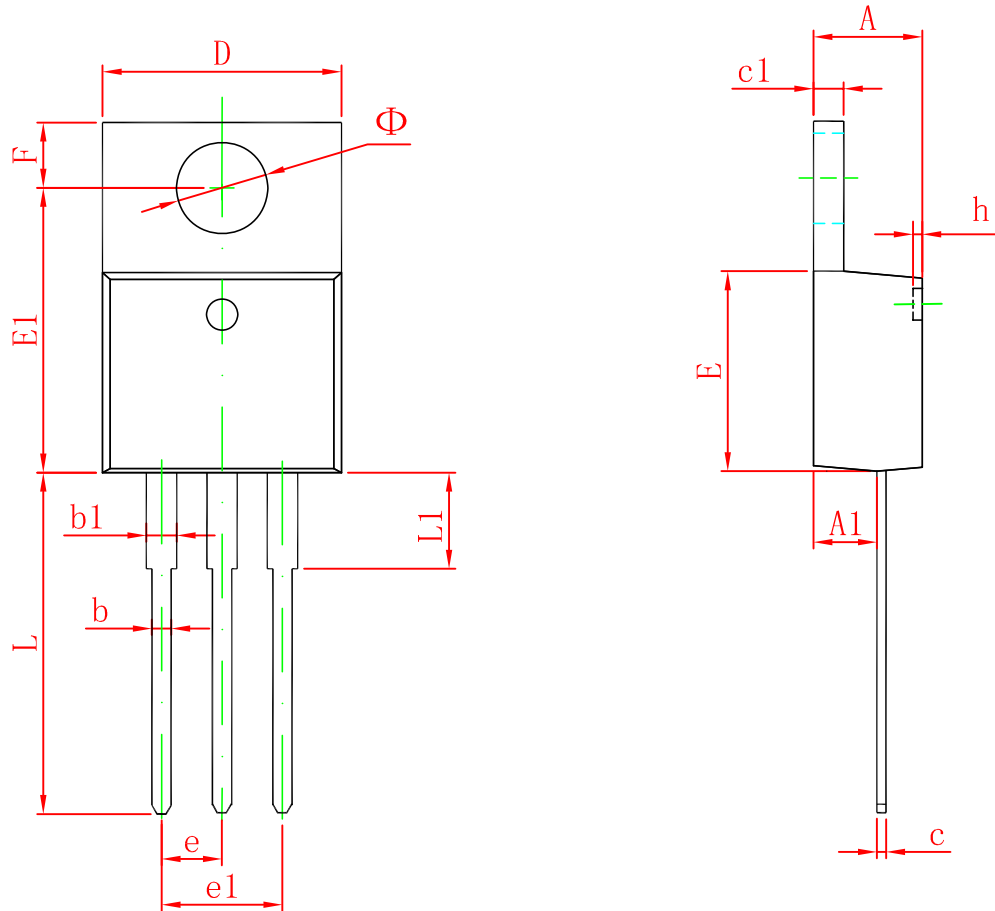


Figure 6. Power Derating

# TO-220 Package Dimensions



Gma Vc`	8 ja Ybg]cbg`b`A]`ja YHfg		8 ja Ybg]cbg`b`bW Yg	
	A]b	AU	A]b	AU
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155