

NPN Epitaxial Silicon Transistor

KSC2073

Features

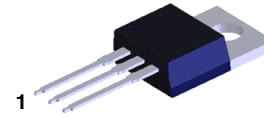
- TV Vertical Deflection Output
- Complement to KSA940
- Collector–Base Voltage : $V_{CBO} = 150\text{ V}$
- These Devices are Pb–Free and Halide Free

ABSOLUTE MAXIMUM RATINGS

($T_A = 25^\circ\text{C}$ unless otherwise noted.)

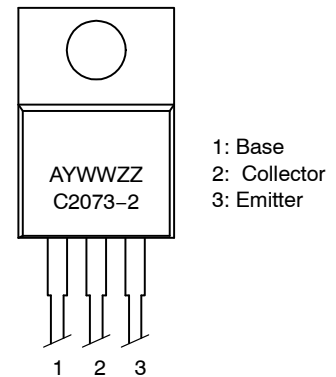
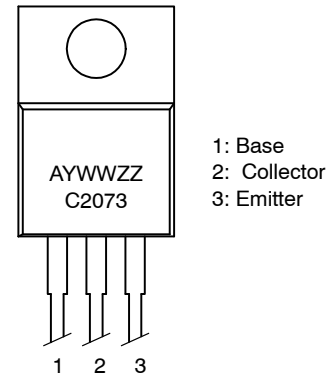
Symbol	Parameter	Value	Unit
V_{CBO}	Collector–Base Voltage	150	V
V_{CEO}	Collector–Emitter Voltage	150	V
V_{EBO}	Emitter–Base Voltage	5	V
I_C	Collector Current	1.5	A
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	$-55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

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.



TO-220-3LD
CASE 340AT

MARKING DIAGRAMS



A = Assembly Plant Code
YWW = 3–Digit Date Code
(Year and Week)
ZZ = 2–Digit Lot Code
C2073, C2073–2 = Specific Device Code

ORDERING INFORMATION

See detailed ordering, marking and shipping information on page 2 of this data sheet.

KSC2073

ELECTRICAL CHARACTERISTICS

(T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
BV _{CBO}	Collector–Base Breakdown Voltage	I _C = 500 μ A, I _E = 0	150	–	–	V
BV _{CEO}	Collector–Emitter Breakdown Voltage	I _C = 10 mA, I _B = 0	150	–	–	V
BV _{EBO}	Emitter–Base Breakdown Voltage	I _E = 500 μ A, I _C = 0	5	–	–	V
I _{CBO}	Collector Cut–Off Current	V _{CB} = 120 V, I _E = 0	–	–	10	μ A
h _{FE}	DC Current Gain	V _{CE} = 10 V, I _C = 0.5 A	40	75	140	
V _{CE(sat)}	Collector–Emitter Saturation Voltage	I _C = 500 mA, I _B = 50 mA	–	–	1	V
f _T	Current Gain Bandwidth Product	V _{CE} = 10 V, I _C = 0.5 A	–	4	–	MHz
C _{ob}	Output Capacitance	V _{CB} = 10 V, I _E = 0, f = 1 MHz	–	50	–	pF

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

h_{FE} CLASSIFICATION

Classification	H1	H2
h _{FE}	40 ~ 80	60 ~ 125

ORDERING INFORMATION

Device	Package	Marking	Shipping
KSC2073TU	TO–220–3LD (Pb–Free)	C2073	1000 Units / Tube
KSC2073H2TU		C2073–2	

TYPICAL PERFORMANCE CHARACTERISTICS

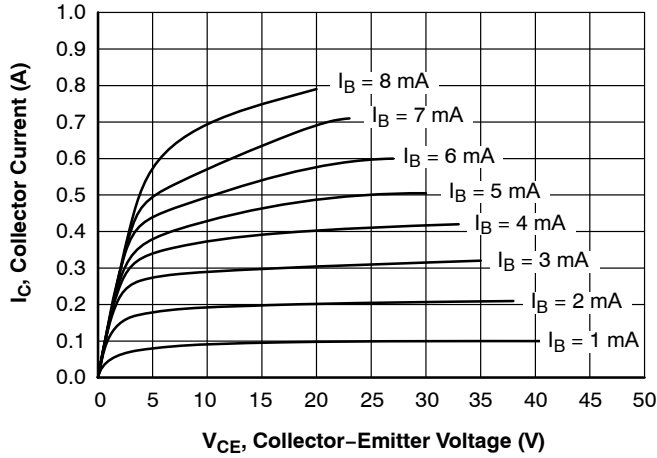


Figure 1. Static Characteristic

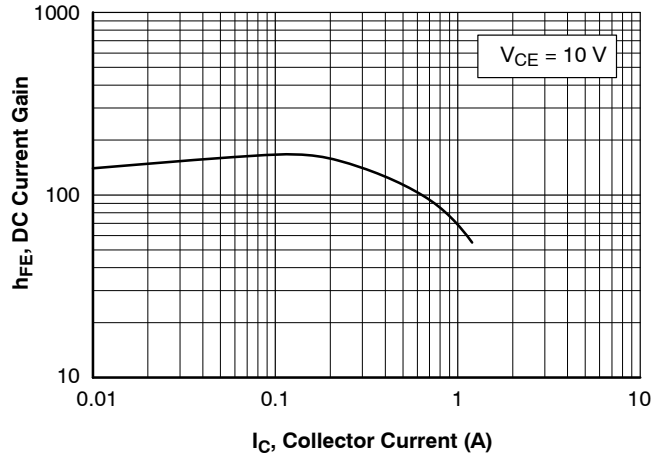


Figure 2. DC Current Gain

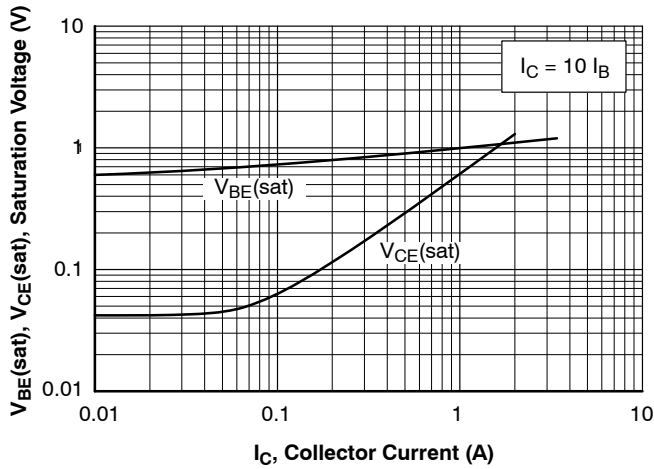
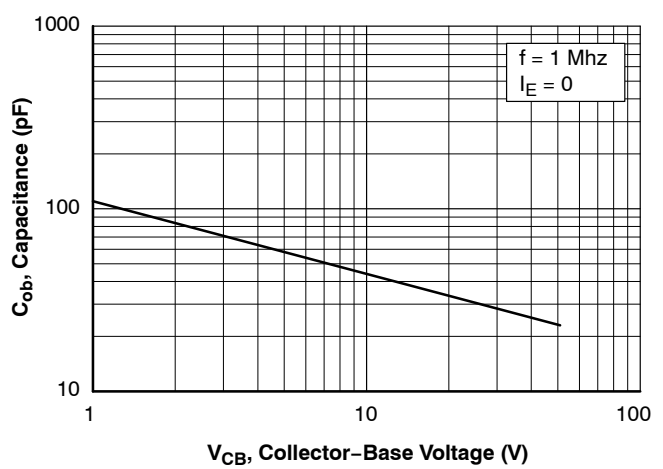
Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

Figure 4. Collector-Base On Voltage

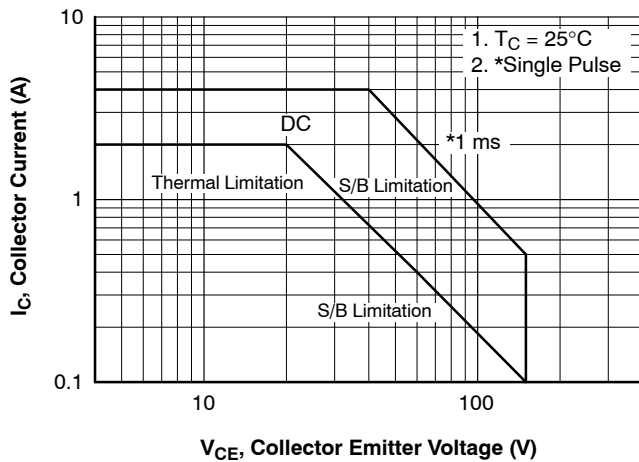


Figure 5. Safe Operating Area

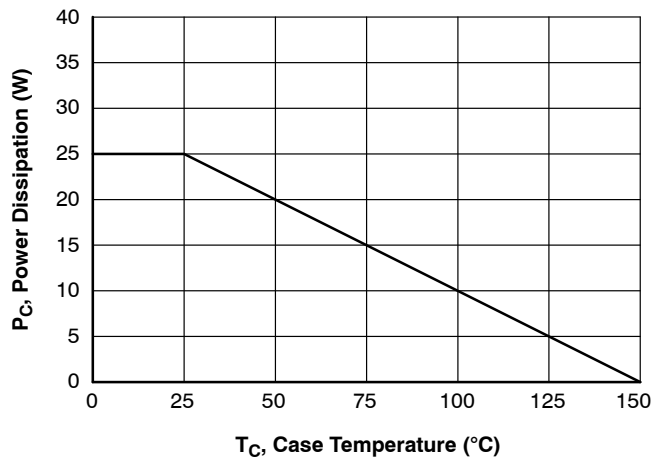
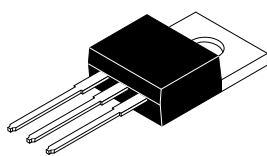


Figure 6. Power Derating

MECHANICAL CASE OUTLINE PACKAGE DIMENSIONS

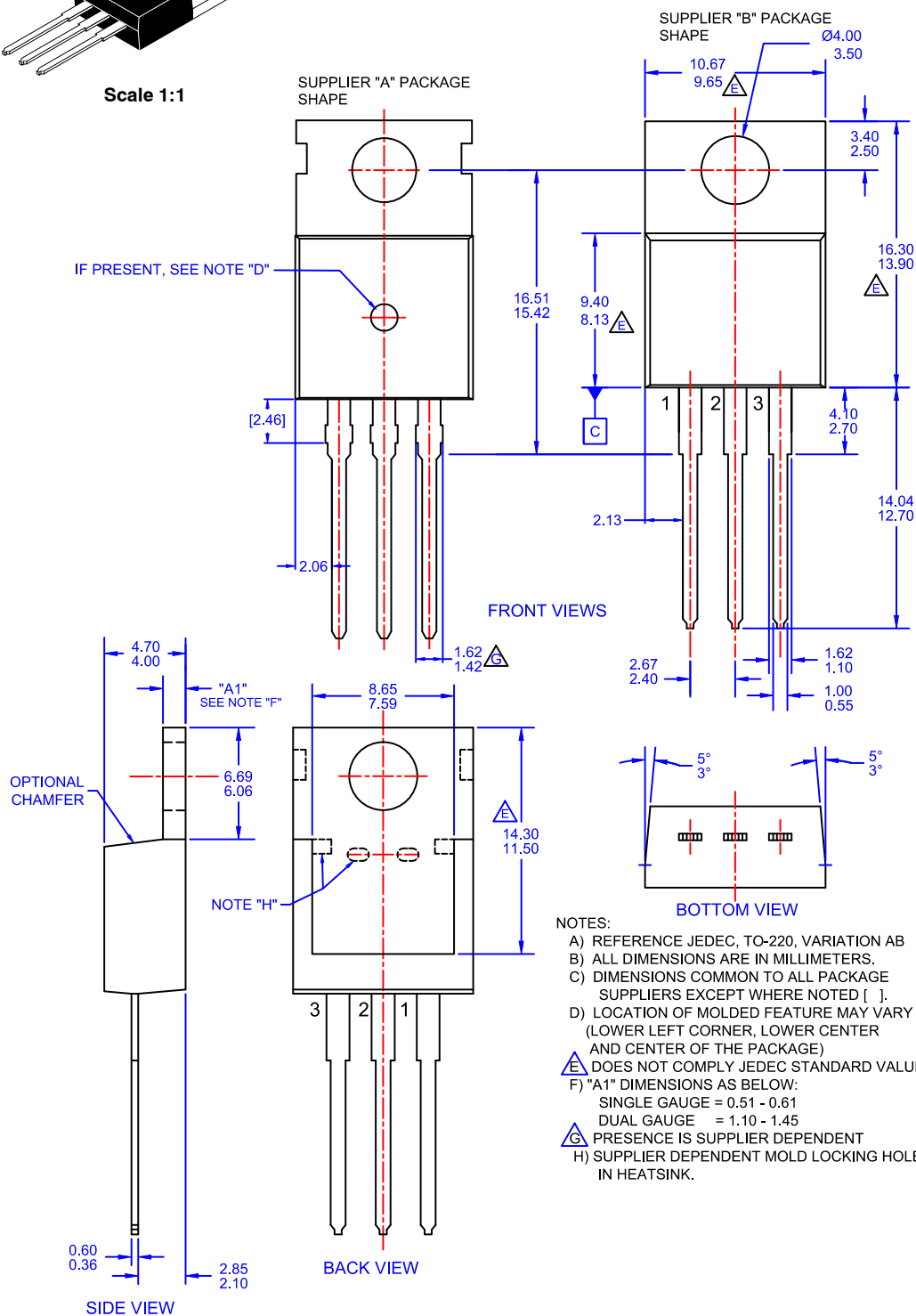
ON Semiconductor®



Scale 1:1

TO-220-3LD CASE 340AT ISSUE A

DATE 03 OCT 2017



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