



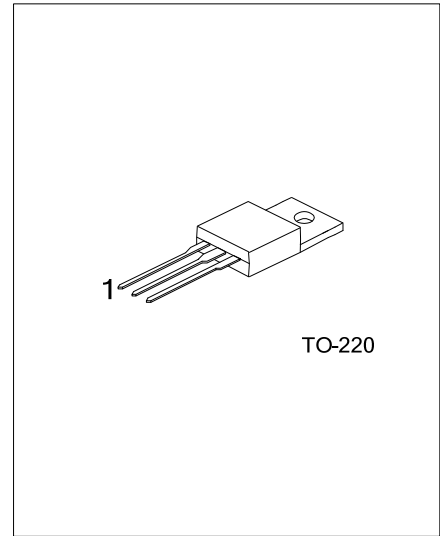
## 2SA940

## PNP SILICON TRANSISTOR

### PNP SILICON POWER TRANSISTORS

#### FEATURES

- \* Collector-Emitter Voltage:  $V_{CE0} = -150V$  (Min.)
- \* DC Current Gain:  $h_{FE} = 40 \sim 140$  @  $I_C = -500mA$
- \* Complementary of NPN 2SC2073



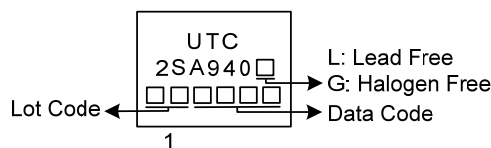
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA940L- TA3-T	2SA940G-TA3-T	TO-220	B	C	E	Tube

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SA940G-TA3-T</p>	<p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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#### MARKING



■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector- Base Voltage	$V_{CB0}$	-150	V
Collector-Emitter Voltage	$V_{CEO}$	-150	V
Emitter-Base Voltage	$V_{EBO}$	-5.0	V
Best Current	$I_B$	-0.5	A
Collector Current Continuous	$I_C$	-1.5	A
Collector Current Peak	$I_{CM}$	-3.0	A
Collector Dissipation	$P_C$	25	W
Junction Temperature	$T_J$	+150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^\circ\text{C}$

Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction-to-Case	$\theta_{JC}$	5.0	$^\circ\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
<b>OFF CHARACTERISTICS</b>						
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_C = -1.0\text{mA}, I_B = 0$	-150			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -5.0\text{mA}, I_B = 0$	-150			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_B = -1.0\text{mA}, I_C = 0$	-5.0			V
Collect Cut-off Current	$I_{CBO}$	$V_{CB} = -120\text{V}, I_E = 0$			-10	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5.0\text{V}, I_C = 0$			-10	$\mu\text{A}$
<b>ON CHARACTERISTICS</b>						
DC Current Ratio	$h_{FE}$	$V_{CE} = -10\text{V}, I_C = -0.5\text{A}$	40		140	
Base-Emitter on Voltage	$V_{BE(ON)}$	$V_{CE} = -5.0\text{V}, I_C = -500\text{mA}$	-0.65		-0.85	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -0.5\text{A}, I_B = -50\text{mA}$			-1.5	V
Current Gain Bandwidth Product	$f_T$	$V_{CE} = -10\text{V}, I_C = -0.5\text{A}, f = 1\text{MHz}$	4.0			$\text{MHz}$

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