

Pb Free Plating Product

## 2SA940



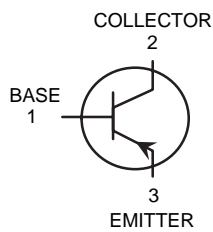
### PNP Silicon Epitaxial Power Transistor

#### FEATURES

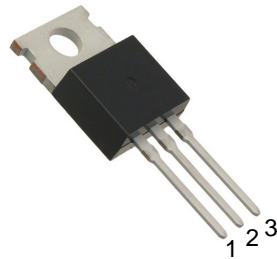
- Complements the 2SC2073.

#### APPLICATIONS

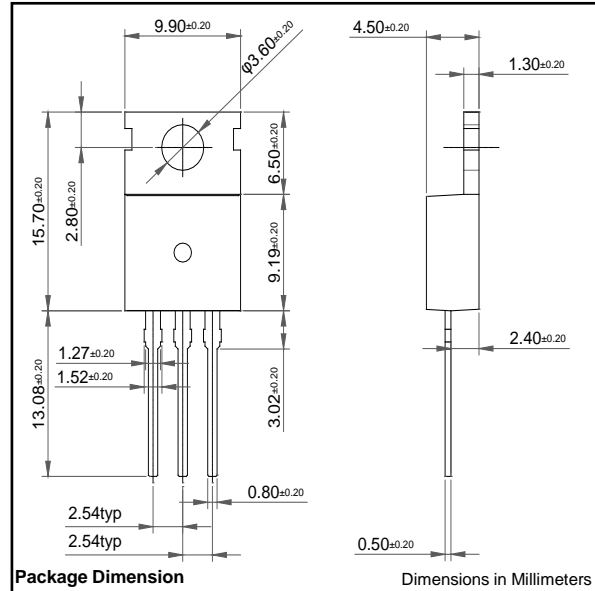
- Power Amplifier Applications.
- Vertical Output Applications.



1. BASE  
2. COLLECTOR  
3. EMITTER



TO-220C



**MAXIMUM RATING** operating temperature range applies unless otherwise specified

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
$I_B$	Base Current	-0.5	A
$P_C$	Collector Dissipation	$T_a=25^\circ\text{C}$	1.5
		$T_c=25^\circ\text{C}$	25
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-150			V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-150			V
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -120V, I_E = 0$			-10	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$			-10	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = -10V, I_C = -500mA$	40		140	
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.5	V
Base-emitter Voltage	$V_{BE(on)}$	$V_{CE} = -10V, I_B = -500mA$	-0.65	-0.75	-0.85	V
Transition Frequency	$f_T$	$V_{CE} = -10V, I_C = -0.5A$		4		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		55		pF

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

