

Epitaxial Planar PNP Transistor

2SA940

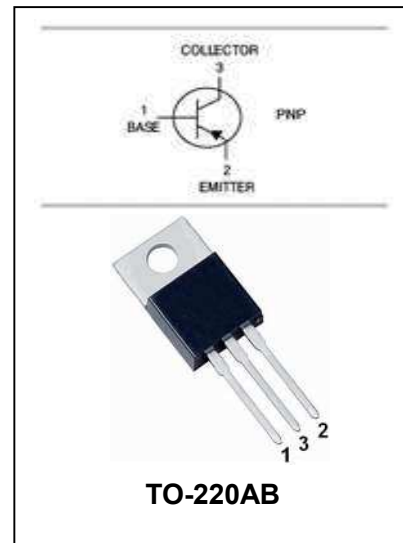
FEATURES

- Complements the 2SC2073.



APPLICATIONS

- Power Amplifier Applications.
- Vertical Output Applications.



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	$^\circ\text{C}$

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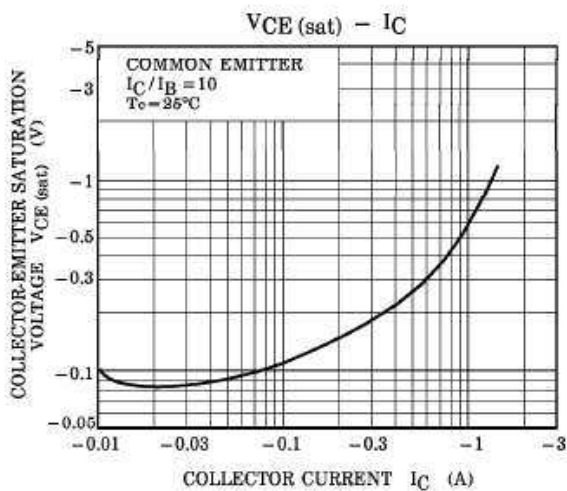
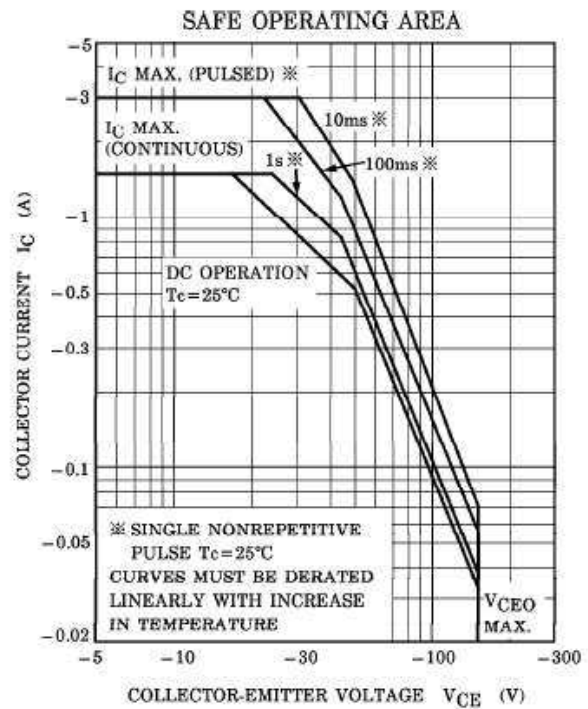
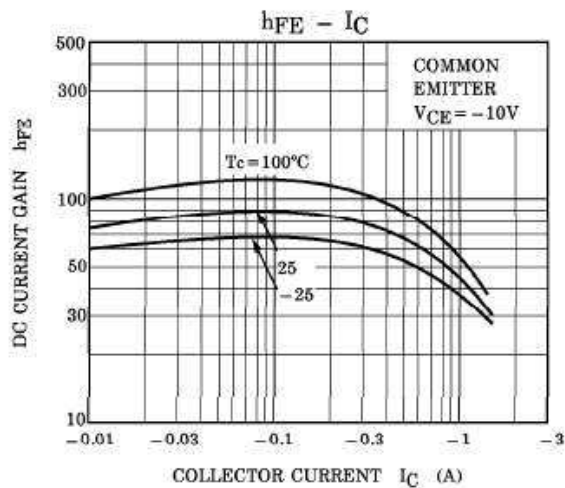
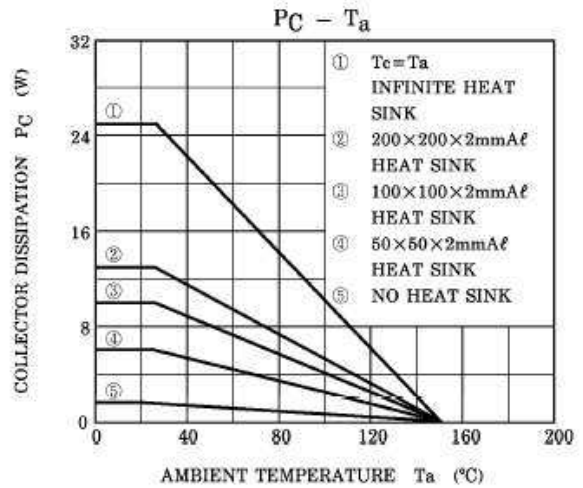
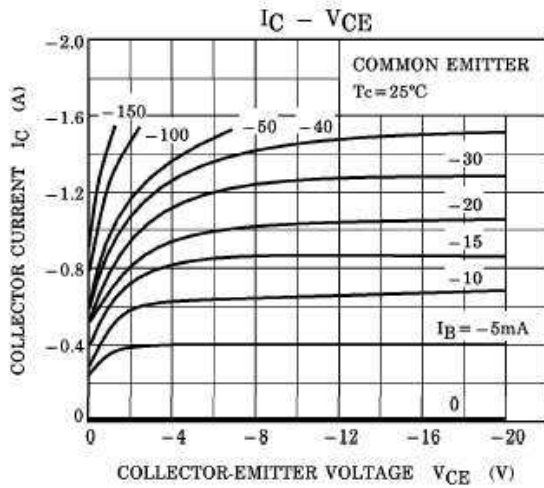
ELECTRICAL CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-10	μA
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

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



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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

