



TO-220 Plastic-Encapsulated Transistors

2SA940 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 1.5 \text{ W (Tamb=25°C)}$$

Collector current

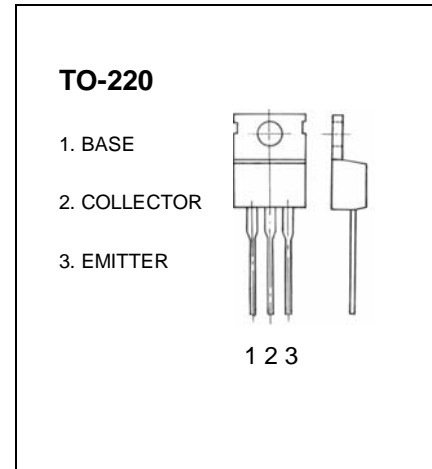
$$I_{CM} : -1.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -150 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55\text{°C to }+150\text{°C}$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-150			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-10	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-10\text{V}, I_C=-500\text{mA}$	40		140	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=-10\text{V}, I_C=-500\text{mA}$	-0.65		-0.85	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-500\text{mA}$		4		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		55		pF