

2SB834 TRANSISTOR (PNP)

FEATURES

Power dissipation

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

Collector current

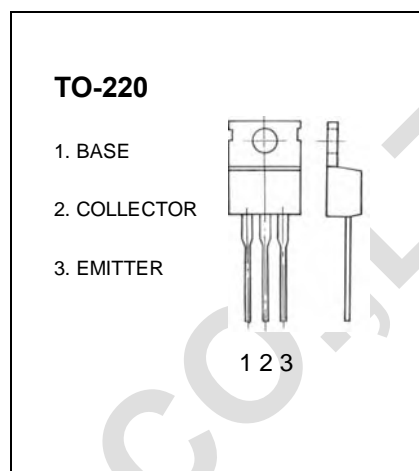
$$I_{CM}: -3 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -60 \text{ V}$$

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -50\text{mA}, I_B = 0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60\text{V}, I_E = 0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -7\text{V}, I_C = 0$			-100	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5\text{V}, I_C = -500\text{mA}$	60		200	
	$h_{FE(2)}$	$V_{CE} = -5\text{V}, I_C = -3\text{A}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3\text{A}, I_B = -0.3\text{A}$			-1	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5\text{V}, I_C = -500\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -500\text{mA}$		9		MHZ
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		150		pF
Turn-on Time	t_{on}	$V_{CC} = -30\text{V}, I_C = -2\text{A}, I_{B1} = I_{B2} = -0.2\text{A}$		0.4		μs
Storage Time	t_{stg}			1.7		μs
Turn-off Time	t_{off}			0.5		μs

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	60-120	100-200