



TO-220 Plastic-Encapsulated Transistors

2SB834 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 1.5 \text{ W (Tamb=25°C)}$$

Collector current

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

Collector-base voltage

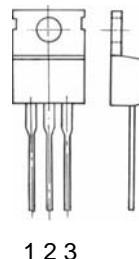
$$V_{(BR)CBO}: -60 \text{ V}$$

Operating and storage junction temperature range

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

TO-220

1. BASE
2. COLLECTOR
3. EMITTER



1 2 3

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

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