

2SB1658 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 1 \text{ W (Tamb=25°C)}$$

Collector current

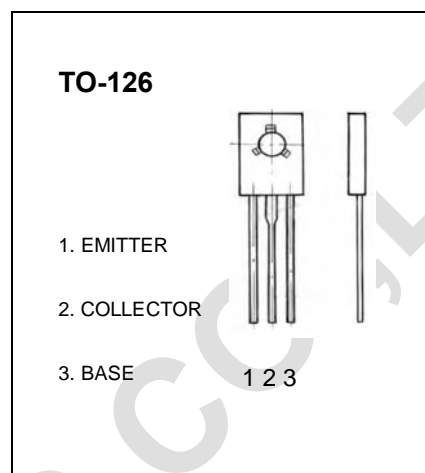
$$I_{CM}: -5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -30 \text{ V}$$

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1 \text{ mA}, I_E = 0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.1 \text{ mA}, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6 \text{ V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 \text{ V}, I_C = -1 \text{ A}$	150		600	
	$h_{FE(2)}$	$V_{CE} = -2 \text{ V}, I_C = -4 \text{ A}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 \text{ A}, I_B = -50 \text{ mA}$ $I_C = -2 \text{ A}, I_B = -100 \text{ mA}$ $I_C = -4 \text{ A}, I_B = -200 \text{ mA}$			-0.15 -0.25 -0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 \text{ A}, I_B = -100 \text{ mA}$			-1.5	V
Transition frequency	f_T	$V_{CE} = -10 \text{ V}, I_C = -50 \text{ mA}$		95		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		100		pF