

2SD2583 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 1 W ($T_{amb}=25^{\circ}C$)

Collector current

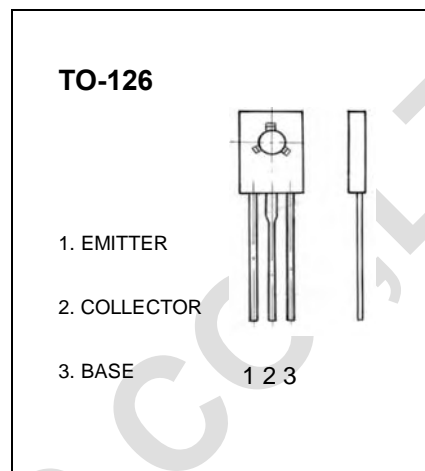
I_{CM} : 5 A

Collector-base voltage

$V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

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



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1mA, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.1mA, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2V, I_C=1A$	150		600	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=4A$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=50mA$ $I_C=2A, I_B=100mA$ $I_C=4A, I_B=200mA$			0.15 0.25 0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=2A, I_B=100mA$			1.5	V
Transition frequency	f_T	$V_{CE}=10V, I_C=50mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		77		pF