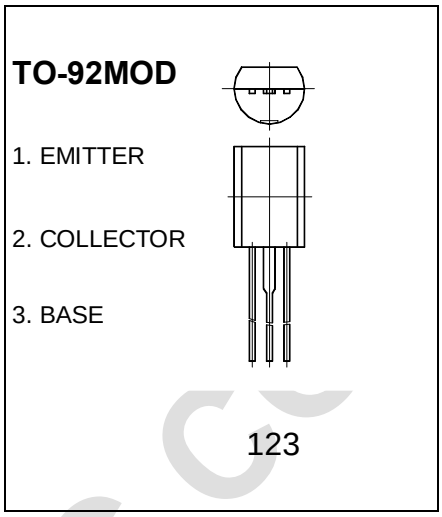
2SD789 TRANSISTOR (NPN)



FEATURE

Power dissipation

$P_{CM:}$ 0.9 W (Tamb=25℃)

Collector current

I_{CM}: 1 A

Collector-base voltage

$V_{(BR)CBO}$: 100 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 10μA , I_E=0	100		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA , I_B=0	50		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 10μA, I_C=0	6		V
Collector cut-off current	I_{CBO}	V_{CB}= 80V, I_E=0		1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=6V, I_C=0		0.2	μA
DC current gain	h_{FE}	V_{CE}=2V, I_C= 100mA	100	800	
Collector-emitter saturation voltage	V_{CEsat}	I_C= 1A, I_B=100mA		0.3	V
Transition frequency	f_T	V_{CE}=2V, I_C= 10mA	80		MHz
Output capacitance	C_{ob}	V_{CE}=10V, I_E=0,f=1 MHz		30	pF

CLASSIFICATION OF h_{FE}

Rank	B	C	D	E
Range	100-200	160-320	250-500	400-800