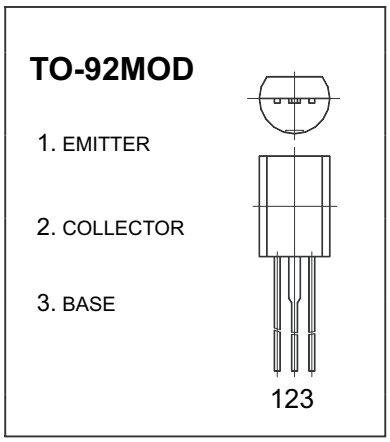
2SD400

TRANSISTOR (NPN)



FEATURES

Power dissipation

P_{CM}: 900 mW (T_A=25℃)

Collector current

I_{CM}: 1 A

Collector-base voltage

$V_{(BR)CBO}$: 25 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (T_{amb}=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V, I_E=0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0			1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=2V, I_C=50mA	60		560	
	$h_{FE(2)}$	V_{CE}=2V, I_C=1A	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA, I_B=50mA			1.2	V
Transition frequency	f_T	V_{CE}=10V, I_C=50mA		180		MHz
Output Capactlance	C_{ob}	V_{CB}=10V, f=1MHz		15		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	D	E	F	G
Range	60-120	100-200	160-320	280-560