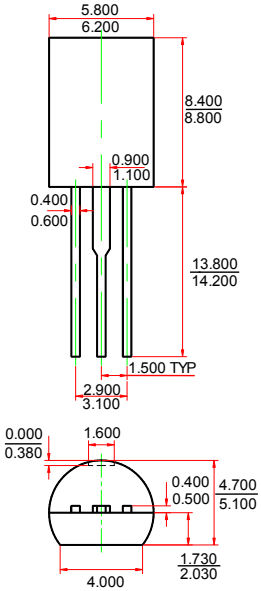
2SD400

TO-92MOD Transistor (NPN)

1. EMITTER
2. COLLECTOR
3. BASE

TO-92MOD



Dimensions in inches and (millimeters)

Features

✧ Low-Frequency power Amp, Electronic Governor Applications

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	25	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1	A
P_C	Collector Power Dissipation	0.9	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=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 Capacitance	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

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Typical Characteristics