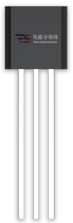
M28S TRANSISTOR (NPN)



TO-92

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- High DC Current Gain and Large Current Capability

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
M28S	TO-92	Bulk	1000pcs/Bag
M28S-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	1	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ 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	40			V
Collector-emitter breakdown voltage	$V_{(BR)\ CEO}$	I_C=1mA,I_B=0	20			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}=40V,I_E=0			1	μA
Collector cut-off current	I_{CEO}	V_{CE}=20V,I_B=0			5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C=1mA	290			
	$h_{FE(2)}$	V_{CE}=1V, I_C=100mA	300		1000	
	$h_{FE(3)}$	V_{CE}=10V, I_C=300mA	300			
	$h_{FE(4)}$	V_{CE}=1V, I_C=500mA	300			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=600mA,I_B=20mA			0.55	V
Transition frequency	f_T	V_{CE}=10V,I_E=50mA ,f=30MHz	100			MHz

CLASSIFICATION OF $h_{FE(2)}$

RANK	B	C	D
RANGE	300-550	500-700	650-1000