

FEATURES

Excellent HFE Linearity.

High DC current gain

Marking : 28S



M28S (NPN)



MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	1000	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=1mA, I_B=0$	20			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=35V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=1mA$	290		1000	
		$V_{CE}=1V, I_C=0.1A$	300			
		$V_{CE}=1V, I_C=0.3A$	300			
		$V_{CE}=1V, I_C=0.5A$	300			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=600mA, I_B=20mA$			0.55	V
Transition frequency	f_T	$V_{CE}=10V, I_C=50mA$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		9		pF

CLASSIFICATION OF h_{FE}

Rank	B	C	D
Range	300-550	500-700	650-1000

M28S Typical Characteristics

