

FEATURES

Complimentary to S9013

MARKING: 2T1
MAXIMUM RATINGS (TA=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	-40	V
Collector-Emitter Voltage	V _{CEO}	-25	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current -Continuous	I _C	-0.5	A
Collector Power Dissipation	P _C	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

S9012 (PNP)

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{CBO}	I _C = -100μA, I _E =0	-40			V
Collector-emitter breakdown voltage	V _{CEO}	I _C = -1mA, I _B =0	-25			V
Emitter-base breakdown voltage	V _{EBO}	I _E =-100μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-40V, I _E =0			-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =-20V, I _B =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 = -50mA	120		400	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-500mA, I _B = -50mA			-0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-500mA, I _B = -50mA			-1.2	V
Transition frequency	f _T	V _{CE} =-6V, I _C = -20mA f=30MHz	150			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			5	pF

 CLASSIFICATION OF h_{FE}

Rank	L	H	J
Range	120-200	200-350	300-400

S9012 Typical Characteristics

