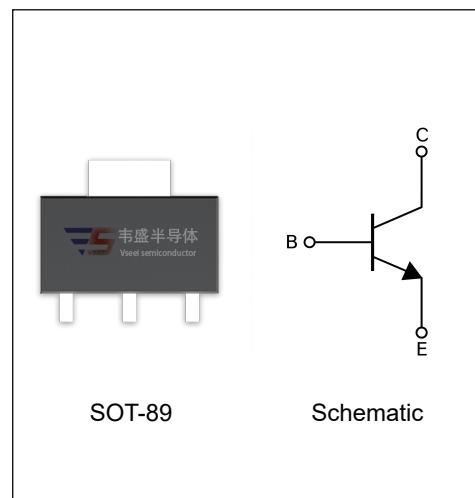


2SD2098 FEATURES

- Excellent DC current gain characteristics
- Complements the 2SB1386



SOT-89

Schematic

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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	20	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	5	A
P _C	Collector Power Dissipation	500	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =50μA, I _E =0	50			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 =50μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =40V, I _E =0			0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			0.5	μA
DC current gain	h _{FE}	V _{CE} =2V, I _C =0.5A	120		390	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =4A, I _B =100mA			1	V
Transition frequency	f _T	V _{CE} =6V, I _C =50mA, f=100MHz		150		MHz
Collector output capacitance	C _{ob}	V _{CB} =20V, I _E =0, f=1MHz		30		pF

CLASSIFICATION OF h_{FE}

Rank	Q	R
Range	120-270	180-390
Marking	AHQ	AHR