Elektronische Bauelemente

2SC1815W

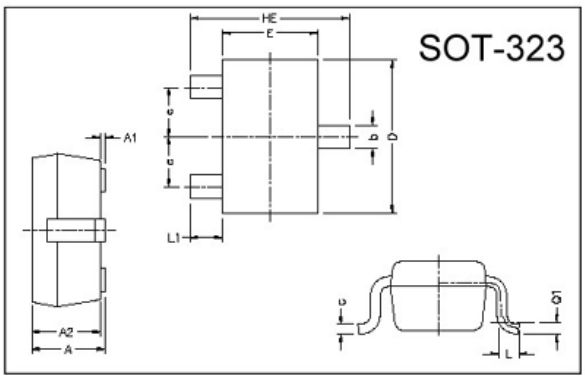
NPN Transistor

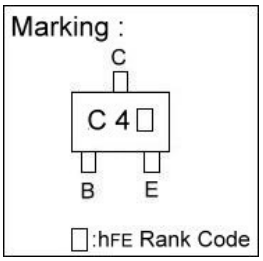
Epitaxial Planar Transistor

RoHS Compliant Product

Description

The 2SC1815W is designed for use in driver stage of AF amplifier and general purpose amplificaion.





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BSC.	

ABSOLUTE MAXIMUM RATINGS Ta=25°C

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	150	mA
P_D	Total Power Dissipation	225	mW
T_J,T_{stg}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	60	-	-	V	I_C= 100μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	50	-	-	V	I_C= 1mA
Emitter-Base Breakdown Voltage	BV_{EBO}	5	-	-	V	I_E= 10μA
Collector-Base Cutoff Current	I_{CBO}	-	-	100	nA	V_{CB}= 60V
Emitter-Base Cutoff Current	I_{EBO}	-	-	100	nA	V_{EB}=5V
Collector Saturation Voltage	*V_{CE}(sat)	-	-	250	mV	I_C=100mA,I_B=10mA
Base Saturation Voltage	*V_{BE}(sat)	-	-	1	V	I_C=100mA,I_B=10mA
DC Current Gain	*h_{FE1}	120	-	700		V_{CE}= 6V, I_C=2mA
	*h_{FE2}	25	-	-		V_{CE}= 6V, I_C=150mA
Gain-Bandwidth Product	fT	80	-	-	MHz	V_{CE}= 10V, I_C= 1mA,f=100MHz
Output Capacitance	C_{ob}	-	-	3.5	pF	V_{CB}=10V, f=1MHz

*Pulse width≦380μs, Duty Cycle≦2%

Classification of hFE

Rank	C4Y	C4G	C4B
Range	120~240	200~400	350~700

Characteristics Curve