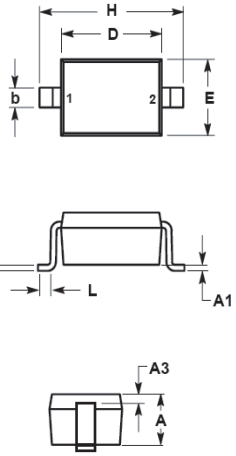
HAICHUANG SEMI

HC592

BAND-SWITCHING DIODE

Features

- Low diode capacitance.
- Low diode forward resistance.
- Small inductance.
- Marking Code:A2



SOD-323		
Dim.	Min.	Max.
A	0.80	1.10
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
L	0.20	0.50
H	2.30	2.80
Dimensions in millimeter		

Maximum Ratings @ T_A = 25°C unless otherwise specified

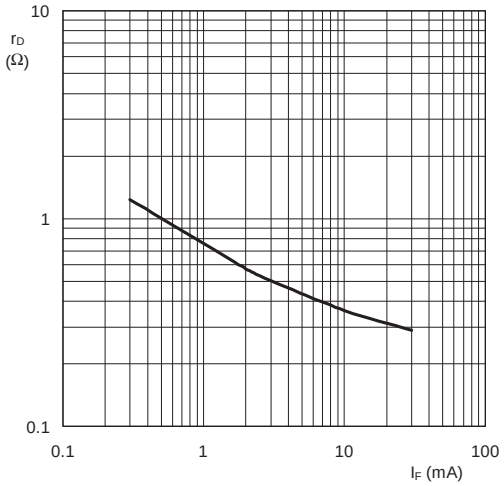
Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	50	V
Contunous Forward Current	I_F	100	mA
Total Power Dissipation [a]	P_{tot}	500	mW
Storage Temperature Range	T_{stg}	- 55 to + 150	°C
Junction Temperature	T_j	150	°C

Note a. T_S = 90 °C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

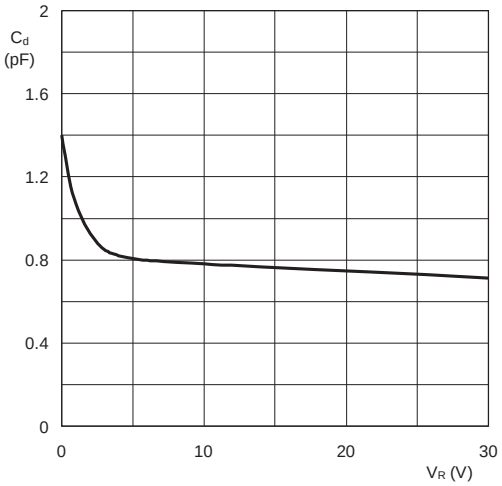
Patameter	Symbol	Test Conditions	Criterion			Unit
			Min	Typ	Max	
Forward Voltage	V_F	I_F=10mA		/	1	V
Reverse Current	I_R	V_R=20V		/	20	nA
Diode Capacitance	C_d	f=1MHz V_R=1V V_R=3V		 0.8 0.65	 2.0 1.8	 pF pF
Diode Forward resistance	r_D	f=100MHz I_F=3mA I_F=10mA		 0.45 0.36	 0.7 0.5	 Ω Ω
Reverse Resistance	1/gp	V_R=1V； f=100MHz		100	/	kΩ
Series Inductance	L_S			2	/	nH

TYPICAL TRANSIENT CHARACTERISTICS



f = 100 MHz; T_j = 25 °C.

Fig.2 Forward resistance as a function of forward current; typical values.



f = 1 MHz; T_j = 2 5 ° C.

Fig.3 Diode capacitance as a function of reverse voltage; typical values.

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