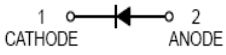
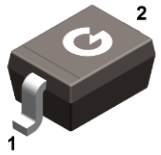
Silicon Epitaxial Planar Diode **SD106WS**

FEATURES

- Low turn-on voltage
- Fast switching
- This device is protected by a PN junction guard ring against excessive voltage,such as electrostatic discharge
- Ideal for precaution of MOS device ,steering ,biasing , and coupling diodes for fast switching and low logic level application
- Microminiature plastic package

HF





SOD-323

APPLICATIONS

- High speed switching

ORDERING INFORMATION

Type No.	Marking	Package Code
SD106WS	S21	SOD-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Limits**	**Unit**
Non-Repetitive Peak reverse voltage	V_{RM}	30	V
Peak forward Current	I_{FM}	200	mA
Forward surge current @t_p=10ms	I_{FSM}	1	A
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient air	$R_{\theta jA}$	500	℃/W
Junction temperature	T_J	-55 to +150	℃
Storage temperature	T_{STG}	-65 to +150	℃

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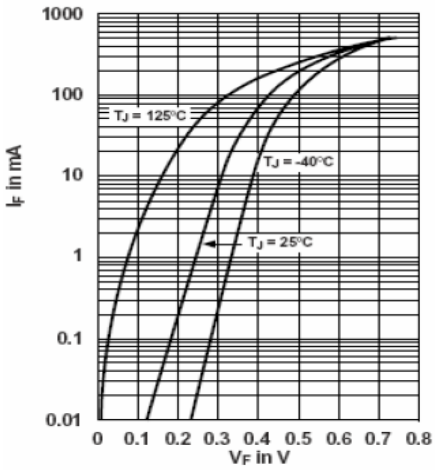
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

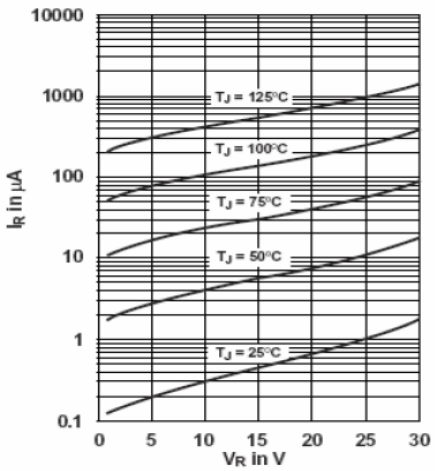
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	V_R	30			V	I_R=100μA
Forward voltage	V_F		260		mV	I_F=2mA
			320			I_F=15mA
			420			I_F=100mA
			490	550		I_F=200mA
Reverse current	I_R			5	μA	V_R=30V
Capacitance between terminals	C_T			15	pF	V_R=10V,f=1MHz

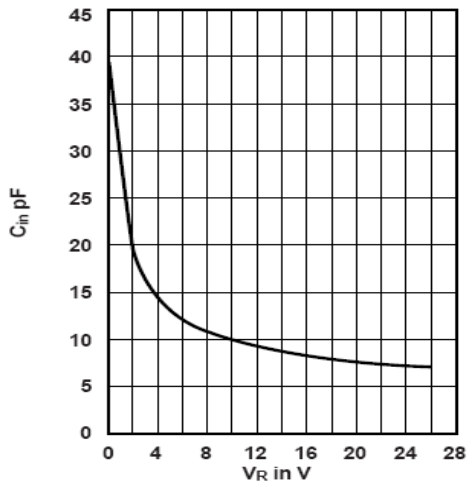
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Forward Voltage Forward Current at Various Temperatures (Typical Values)



Typical Variation of Reverse Current at Various Temperatures





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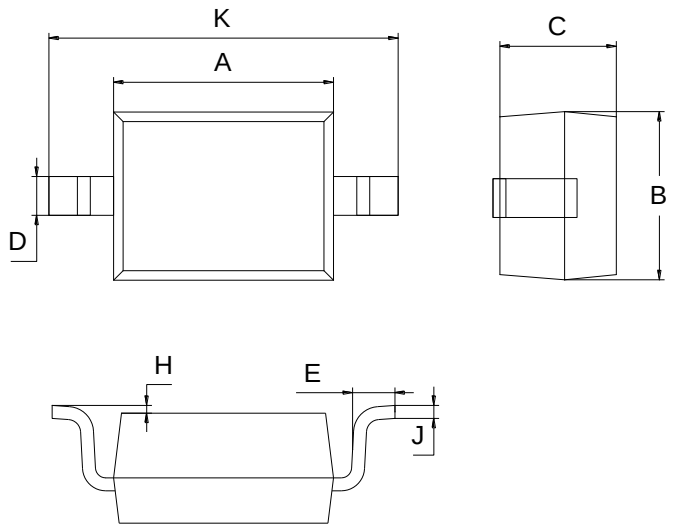
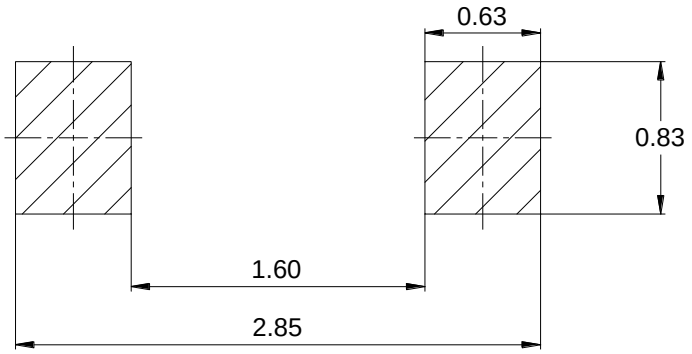
PACKAGE OUTLINE

Plastic surface mounted package SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
SD106WS	SOD-323	3000 pcs / Tape & Reel