20V Repetitive Peak Reverse Voltage SS12A Schottky Barrier Diode SMA Package

Basic Information

Place of Origin:	Shenzhen, Guangdong, China
Brand Name:	SOCAY
Certification:	REACH,RoHS,ISO
Model Number:	SS12A
Minimum Order Quantity:	5000PCS
Price:	Negotiable
Delivery Time:	5-8 work days

Product Specification

Component Name:	Schottky Barrier Diode
Package Type:	DO-214AC(SMA)
VRRM:	20V
VRMS:	14V
VDC:	20V
IF(AV):	1A
IFSM:	40A
Dv/dt:	10000V/μs

Product Description

20V Repetitive Peak Reverse Voltage SS12A Schottky Barrier Diode SMA Package

Schottky Barrier Diode DATASHEET: SS12A~SS120A(SMA)_v2211.1.pdf

Schottky Barrier Diode Features:
Low profile package
Ideal for automated placement
Ultrafast reverse recovery time
Low power losses, high efficiency
Low forward voltage drop
High surge capability
High temperature soldering:
260 /10 seconds at terminals
Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC

Schottky Barrier Diode Mechanical Data:
Case: JEDEC DO-214AC molded plastic
Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
Polarity: Laser band denotes cathode end

Schottky Barrier Diode Major Ratings and Characteristics:

$I_{F(AV)}$	1.0A
V_{RRM}	20 V to 200 V
I_{FSM}	40A
V_F	0.50V, 0.55V, 0.70V, 0.85V,0.95V
$T_{j\ max.}$	125

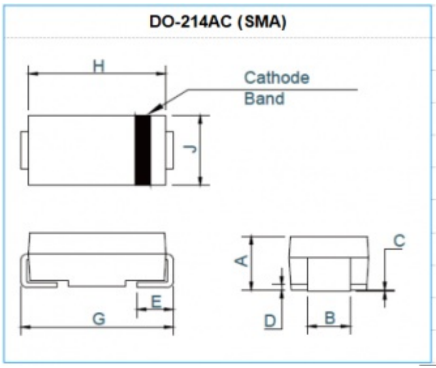
Schottky Barrier Diode Maximum Ratings & Thermal Characteristics(T_A = 25 unless otherwise noted):

Items	**Symbol**	**SS12A**	**SS13A**	**SS14A**	**SS15A**	**SS16A**	**SS18A**	**SS110A**	**SS115A**	**SS120A**	**Unit**
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	1									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	40									A
Voltage rate of change (rated V_R)	dv/dt	10000									V/μs
Thermal resistance from junction to lead (1)	$R_{\theta JL}$	35									/W
Operating junction and storage temperature range	T_J,T_{STG}	–65 to +125									
Note 1: Mounted on P.C.B. with 0.2 x 0.2” (5.0 x 5.0mm) copper pad areas.											

Schottky Barrier Diode Electrical Characteristics (T_A = 25 unless otherwise noted):

Items	**Test conditions**		**Symbol**	**SS12A**	**SS13A~SS14A**	**SS15A~SS16A**	**SS18A~SS110A**	**SS115A~SS120A**	**Unit**
Instantaneous forward voltage	IF=1.0A(2)		VF	0.50	0.55	0.70	0.85	0.95	V
Reverse current	VR=VDC	Tj=25	IR	0.5					mA
		Tj=100		5.0					
Note 2: Pulse test:300μs pulse width,1% duty cycle.									

Schottky Barrier Diode SS12A Diode Dimensions:



Dim	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.067	0.093	1.7	2.36
B	0.049	0.067	1.25	1.7
C	0.002	0.008	0.05	0.2
D	--	0.02	--	0.51
E	0.03	0.06	0.76	1.52
G	0.185	0.209	4.7	5.31
H	0.157	0.185	4	4.7
J	0.086	0.11	2.18	2.8

Schottky Barrier Diode SS12A Notice:

Product is intended for use in general electronics applications.

Product should be worked less than the ratings; if exceeded, may cause permanent damage,or introduce latent failure mechanisms.

The absolute maximum ratings are rated values and must not be exceeded during operation. The following are the general derating methods you design a circuit with a device.

$I_{F(AV)}$: We recommend that the worst case current be no greater than 80% .

I_{FSM} : This rating specifies the non-repetitive peak current. This is only applied for an abnormal operation, which the general during the lifespan of the device.

T_J : Derate this rating when using a device in order to ensure high reliability. We recommend that the device be used at a T_J of below 100 .

SOCAY®

GuangDong Province, China