

SS14 Datasheet



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DiGi Electronics Part Number	SS14-DG
Manufacturer	onsemi
Manufacturer Product Number	SS14
Description	DIODE SCHOTTKY 40V 1A DO214AC
Detailed Description	Diode 40 V 1A Surface Mount DO-214AC (SMA)

This model SS14 is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

SS14

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

1A

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Capacitance @ Vr, F:

-

Package / Case:

DO-214AC, SMA

Operating Temperature - Junction:

-65°C ~ 125°C

Manufacturer:

onsemi

Product Status:

Not For New Designs

Voltage - DC Reverse (Vr) (Max):

40 V

Voltage - Forward (Vf) (Max) @ If:

500 mV @ 1 A

Current - Reverse Leakage @ Vr:

200 µA @ 40 V

Mounting Type:

Surface Mount

Supplier Device Package:

DO-214AC (SMA)

Base Product Number:

SS14

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

Schottky Rectifier

SS12 - S100

Description

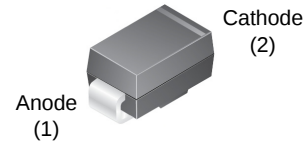
The SS12-S100 series includes high-efficiency, low power loss, general-purpose schottky rectifiers. The clip-bonded leg structure provides high thermal performance and low electrical resistance. These rectifiers are suited for free wheeling, secondary rectification, and reverse polarity protection applications.

Features

- Glass-Passivated Junctions
- High-Current Capability, Low V_F
- These Devices are Pb-Free, Halogen Free and are RoHS Compliant

Applications

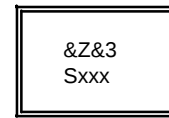
- Low Voltage
- High-Frequency Inverters
- Free Wheeling
- Polarity Protection



**SMA
CASE 403AE**



MARKING DIAGRAM



&Z = Assembly Plant Code
&3 = Date Code (Year & Week)
Sxxx = Specific Device Code

ORDERING INFORMATION

Part Number	Top Mark	Package	Shipping [†]
SS12	SS12	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS13	SS13	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS14	SS14	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS15	SS15	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS16	SS16	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS18	SS18	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
SS19	SS19	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel
S100	S100	SMA (Pb-Free/Halogen Free)	7500 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

SS12 – S100**Specifications****ABSOLUTE MAXIMUM RATINGS** ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value								Unit
		SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	
V_{RRM}	Peak Repetitive Reverse Voltage	20	30	40	50	60	80	90	100	V
$I_{F(AV)}$	Maximum Average Forward Current: 0.375-inch Lead Length at $T_A = 75^\circ\text{C}$	1.0								A
I_{FSM}	Non-Repetitive Peak Forward Surge Current: 8.3 ms Single Half-Sine Wave	40								A
T_J	Operating Junction Temperature	-65 to $+125$								$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-65 to $+150$								$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

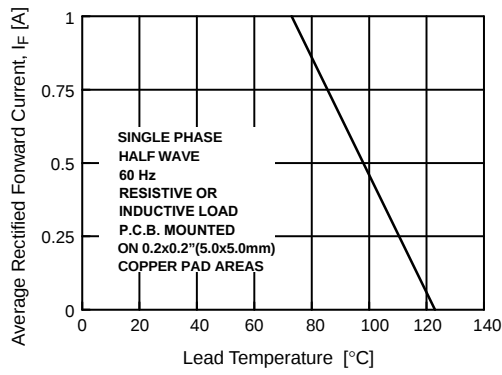
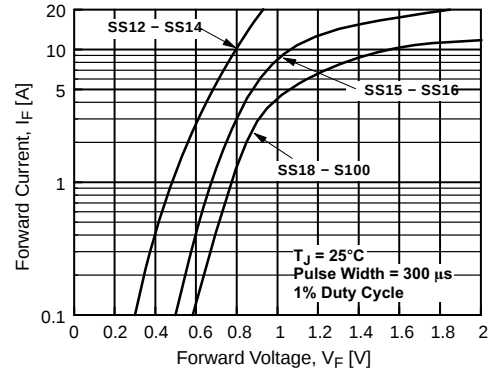
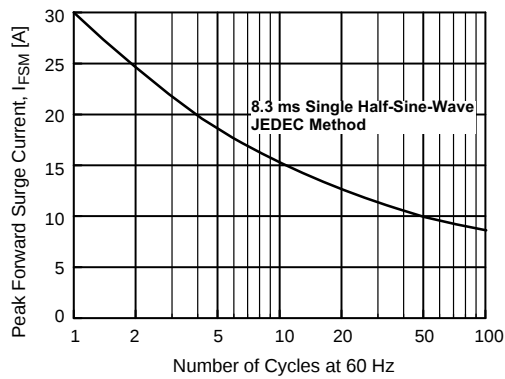
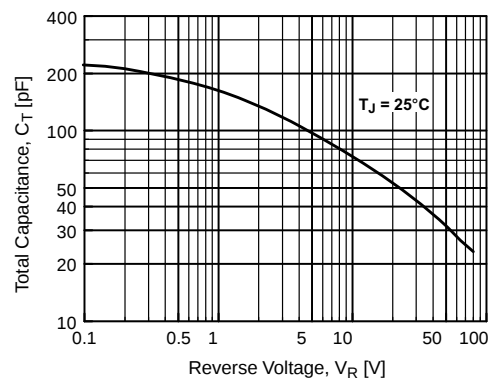
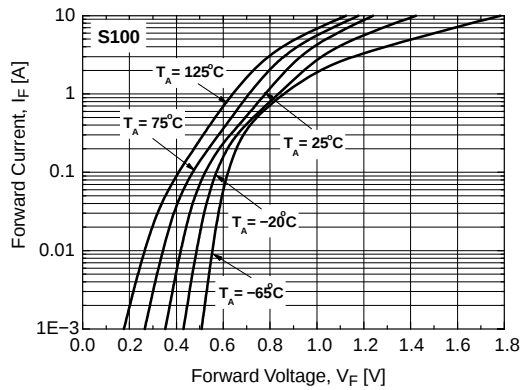
Symbol	Characteristic	Value	Unit
P_D	Power Dissipation	1.1	W
$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient (Note 1)	88	$^\circ\text{C/W}$

1. Device mounted on FE-4 PCB 0.013 mm.

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

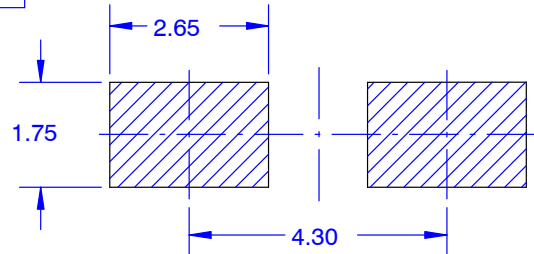
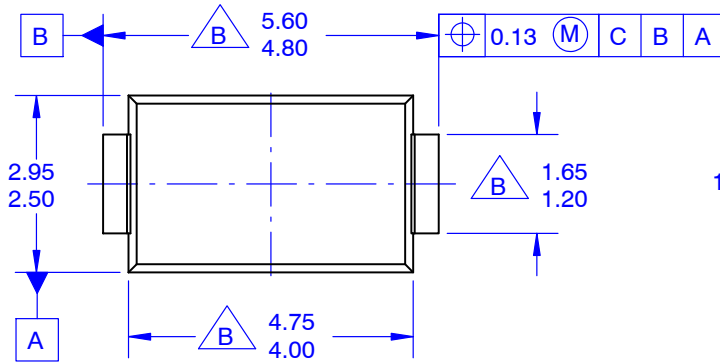
Symbol	Parameter	Conditions	Value								Unit
			SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	
V _F	Maximum Forward Voltage	I _F = 1.0 A	500			700		850			mV
I _R	Maximum Reverse Current at Rated V _R	T _A = 25°C	0.2								mA
		T _A = 100°C	10								

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

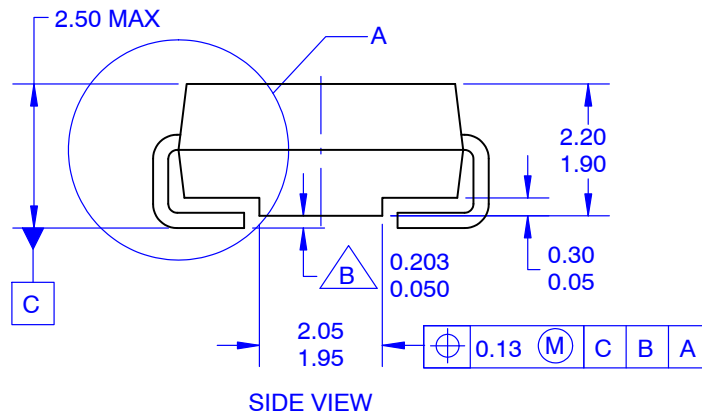
SS12 – S100**TYPICAL PERFORMANCE CHARACTERISTICS****Figure 1. Forward Current Derating Curve****Figure 2. Forward Voltage Characteristics****Figure 3. Non-Repetitive Surge Current****Figure 4. Total Capacitance****Figure 5. Low-Current Forward Voltage Characteristics**

SMA
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ISSUE O

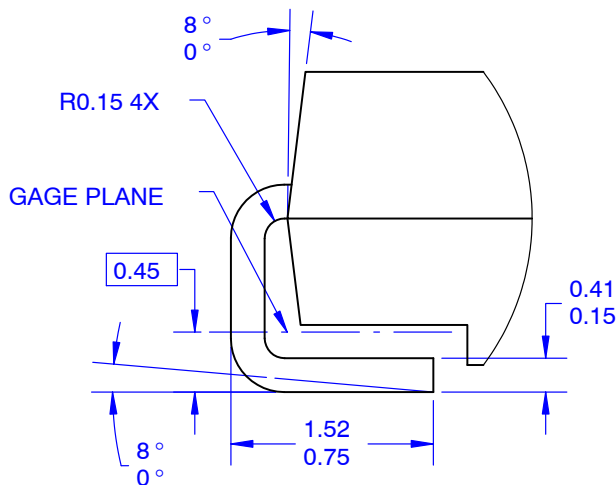
DATE 31 AUG 2016



LAND PATTERN RECOMMENDATION

**NOTES:**

- A. EXCEPT WHERE NOTED, CONFORMS TO JEDEC DO214 VARIATION AC.
- B. DOES NOT COMPLY JEDEC STANDARD VALUE.
- C. ALL DIMENSIONS ARE IN MILLIMETERS.
- D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
- E. DIMENSIONS AND TOLERANCE AS PER ASME Y14.5-2009.
- E. LAND PATTERN STD. DIOM5025X231M


DETAIL A
SCALE 20 : 1

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