

Surface Mount Schottky Barrier Rectifiers

SS54A-SS520A
40 to 200 V
5.0A
DO-214AC(SMA)

Features

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- ◆ Case: SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 60mg / 0.0021oz


DO-214AC(SMA)

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter		Symbol	SS54A	SS56A	SS510A	SS515A	SS520A	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	40	60	100	150	200	V
Maximum RMS Voltage		V _{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage		V _{DC}	40	60	100	150	200	V
Maximum Average Forward Current		I _{F(AV)}	5.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	150					A
Max Instantaneous Forward Voltage at 5 A		V _F	0.55	0.70	0.85			V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃ Ta=100℃	I _R	1.0 50					mA
Typical Junction Capacitance ⁽¹⁾		C _j	500	300				pF
Typical Thermal Resistance ⁽²⁾		R _{θJA}	60					℃/ W
Operating Junction Temperature Range		T _J	-55 to +150					℃
Storage Temperature Range		T _{STG}	-55 to +150					℃

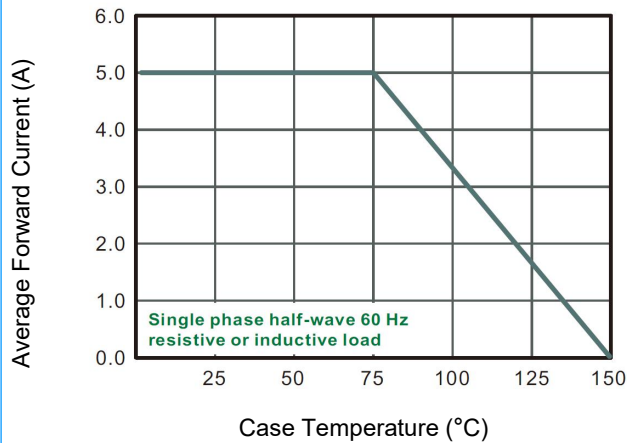
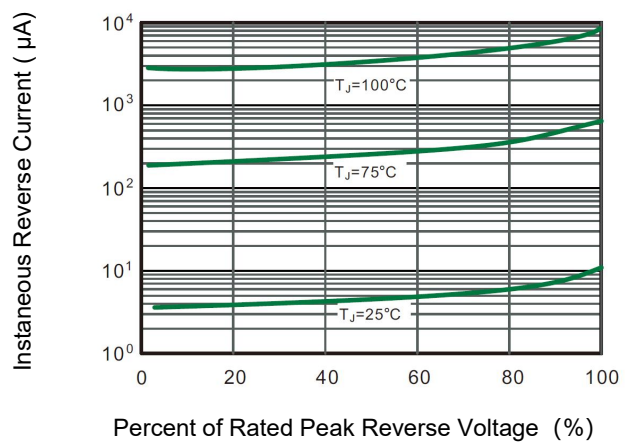
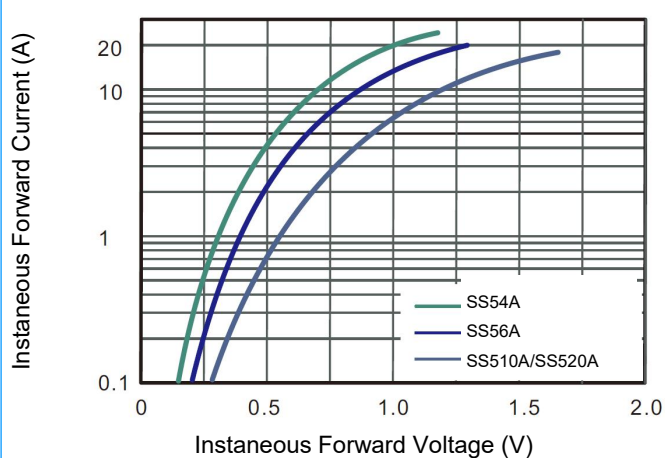
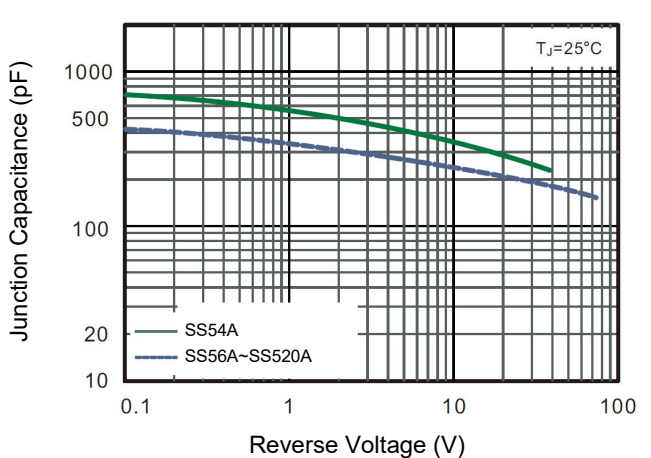
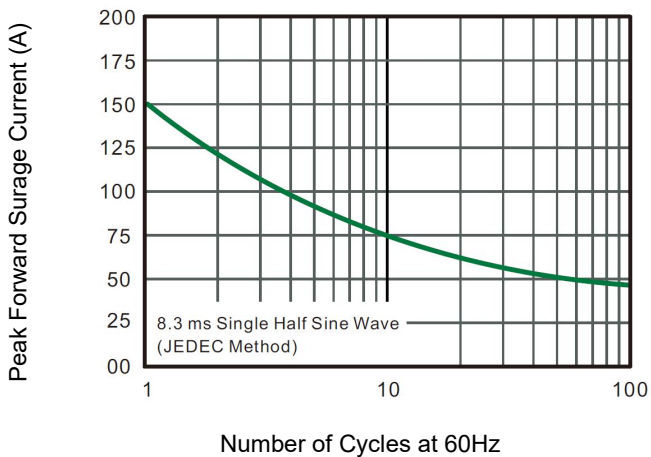
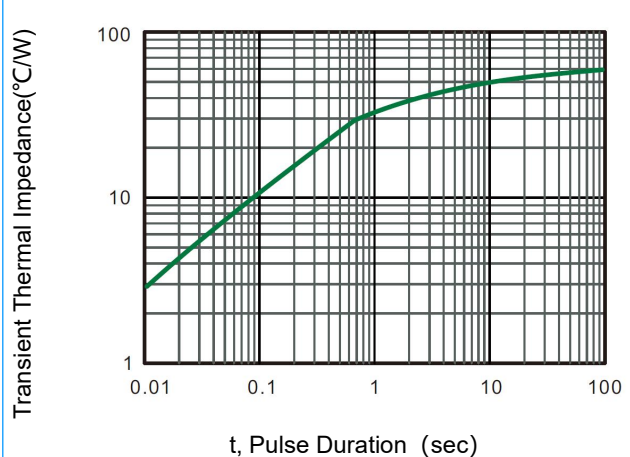
Notes: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Surface Mount Schottky Barrier Rectifiers

SS54A-SS520A
40 to 200 V
5.0A
DO-214AC(SMA)

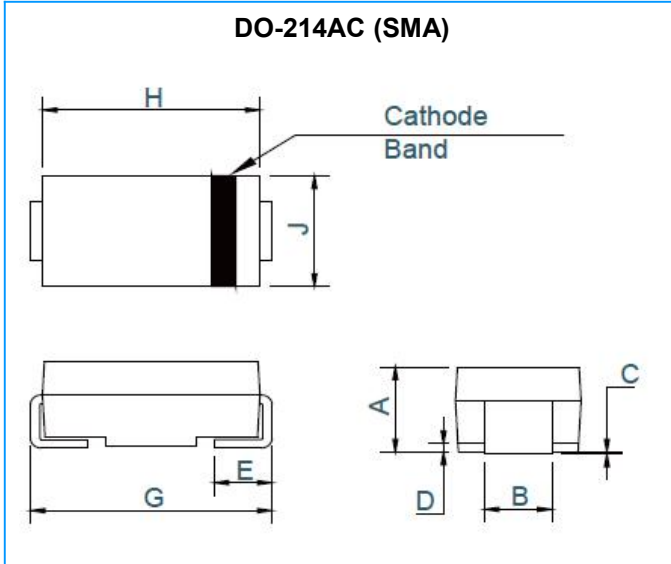
Rating and Characteristic Curves

Fig1. Forward Current Derating Curve

Fig2. Typical Reverse Characteristics

Fig3. Typical Forward Characteristics

Fig4. Typical Junction Characteristics

Fig5. Maximum Non-Repetitive Peak Forward Surge Current

Fig6- Typical Transient Thermal Impedance


Surface Mount Schottky Barrier Rectifiers

SS54A-SS520A
40 to 200 V
5.0A
DO-214AC(SMA)

Dimensions



Dimensions				
Dim	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

Packaging Information

Part Number	Component Package	Quantity
SS54A~SS520A	DO-214AC(SMA)	5000 PCS

Warning



- ◆ SOCAY owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property.
- ◆ SOCAY reserves the right to make changes without further notice to any products herein.
- ◆ SOCAY makes no warranties, representations or warranties as to the fitness of its products for any particular purpose, and disclaims any liability.
- ◆ The parameters provided in the SOCAY datasheet specification may vary from application to application, and the actual performance may vary over time. All operating parameters must be verified by the customer's technical expert before application.
- ◆ Any and all responsibilities and liabilities are disclaimed if any item under this notice of warning is not complied with.