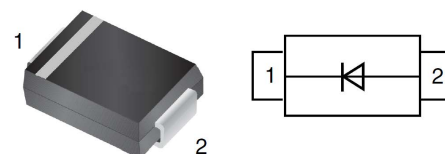


Schottky Barrier Rectifier in DO-214AC/SMA

Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature



Mechanical Data

- **Case:** DO-214AC/SMA (plastic package). Lead free; RoHS compliant
- **Molding Compound Flammability Rating:** UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	SS210A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150	°C

Electrical Characteristics

($T_A = 25\text{ °C}$ unless otherwise specified)

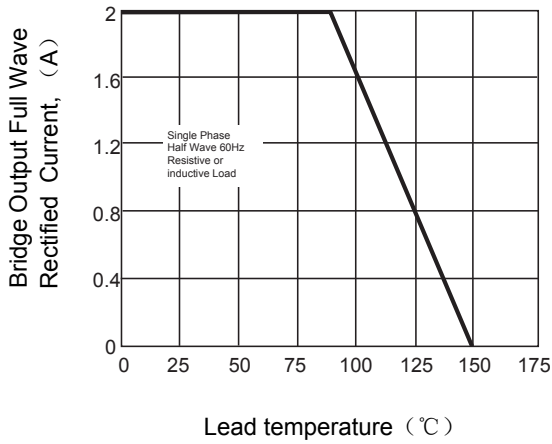
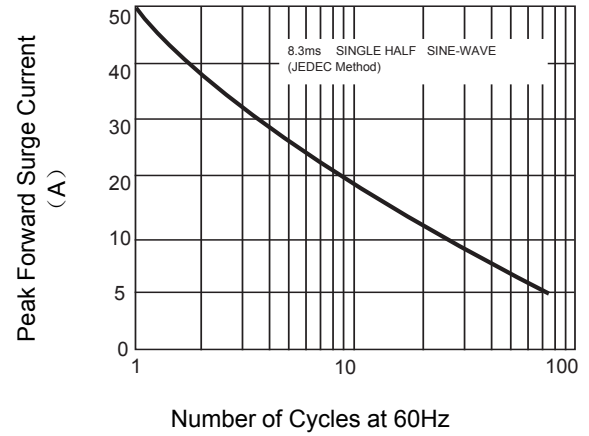
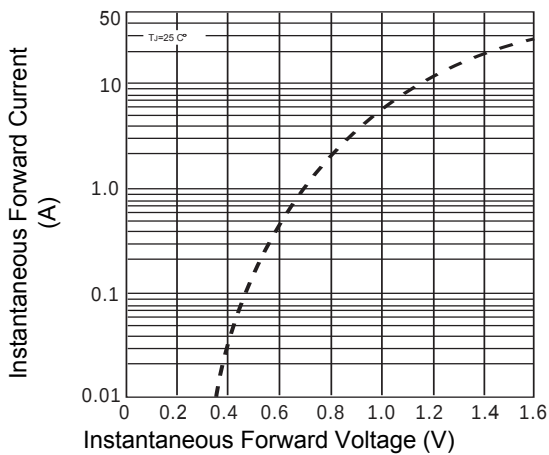
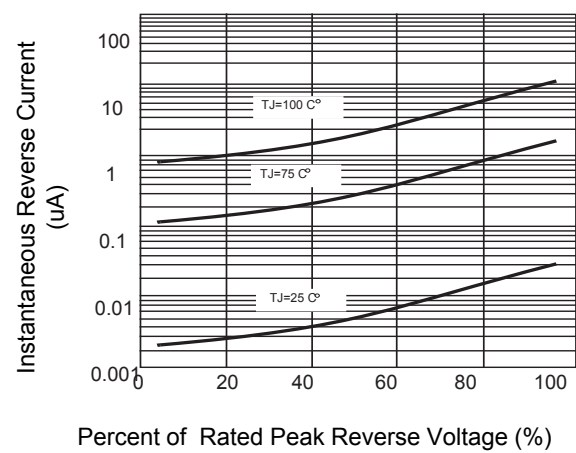
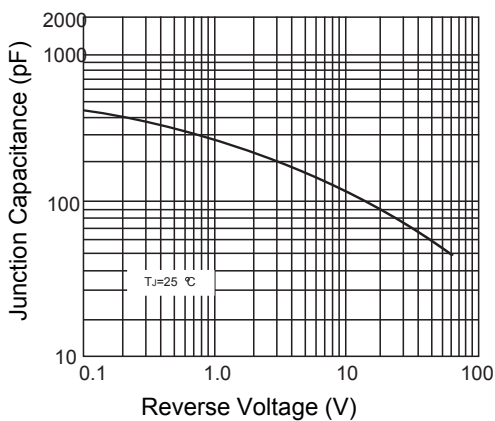
Parameter	Test Conditions	Symbol	SS210A	Unit
Maximum instantaneous forward voltage	$I_F=2A, T_A=25\text{ °C}$	V_F	0.85	V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25\text{ °C}$	I_R	0.1	mA
	$T_A=100\text{ °C}$		10	
Typical junction capacitance	4.0 V, 1 MHz	C_J	180	pF

Thermal Characteristics

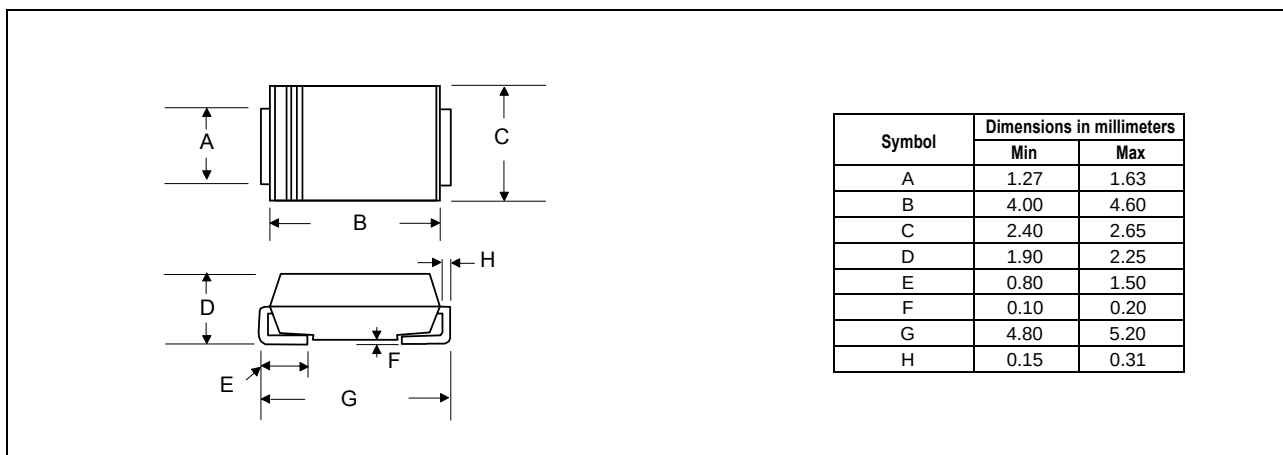
Parameter	Symbol	SS210A	Unit
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	80	°C/W
Operating junction temperature range	T_J	-55 to +150	
Storage temperature range	T_{STG}	-55 to +150	

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0×5.0mm copper pads

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Figure 1. Forward Current Derating Curve

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

Figure 3. Typical Instantaneous Forward Characteristics

Figure 4. Typical Reverse Characteristics

Figure 5. Typical Junction Capacitance


Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SS210A	DO-214AC/SMA	Tape and reel	5000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
22-Feb-2024	4.0	Update

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