

Surface Mount Schottky Rectifier

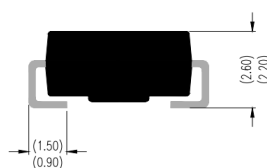
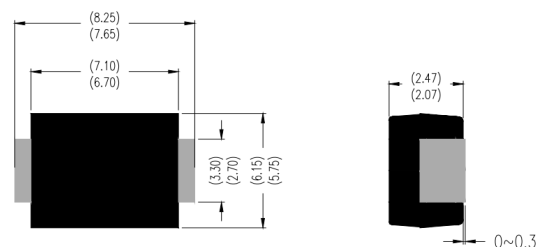
SMC/DO-214AB

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Compliant with RoHS standards, halogen-free

Mechanical Data

- **Package:** SMC/DO-214AB
- **Terminals:** Tin plated leads, solderable per
- **Polarity:** Color band denotes the cathode end



Unit : inch(mm)



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

Parameter	Symbol	Unit	SS10 20C	SS10 30C	SS10 40C	SS10 50C	SS10 60C	SS10 80C	SS10 100C	SS10 150C	SS10 200C
Repetitive Peak Reverse Voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1)	I_O	A	10.0								
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave, 1 cycle, $T_A=25^\circ\text{C}$	I_{FSM}	A	120								
Storage Temperature	T_{stg}	$^\circ\text{C}$	-55 ~+150								
Junction Temperature	T_J	$^\circ\text{C}$	-55 ~+150					-55 ~+175			

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

Parameter	Symbol	Unit	Test Conditions	SS10 20C	SS10 30C	SS10 40C	SS10 50C	SS10 60C	SS10 80C	SS10 100C	SS10 150C	SS10 200C
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =10.0A	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	mA	Ta=25℃	0.2					0.1			
			Ta=100℃	20					5.0			

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

Parameter	Symbol	Unit	SS10 20C	SS10 30C	SS10 40C	SS10 50C	SS10 60C	SS10 80C	SS10 100C	SS10 150C	SS10 200C
Thermal Resistance	Between junction and ambient	$R_{\theta JA}$	65 ⁽¹⁾								
	Between junction and lead	$R_{\theta JL}$	8 ⁽¹⁾								

Note (1)

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas



Characteristics (Typical)

FIG.1: Io-TL Curve

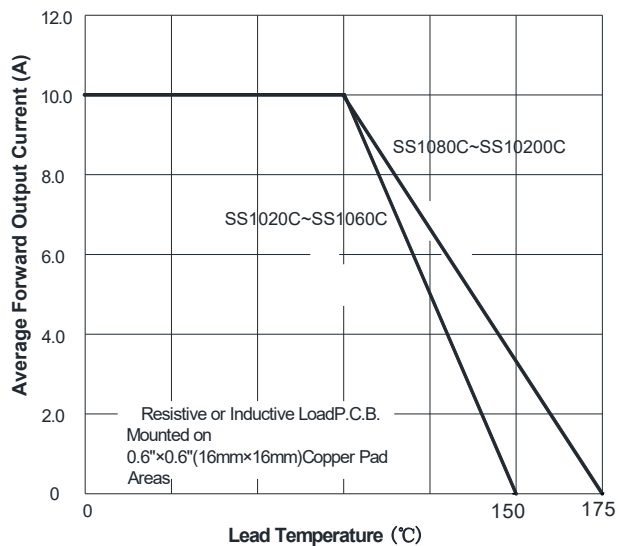


FIG.2: Forward Surge Current Capability

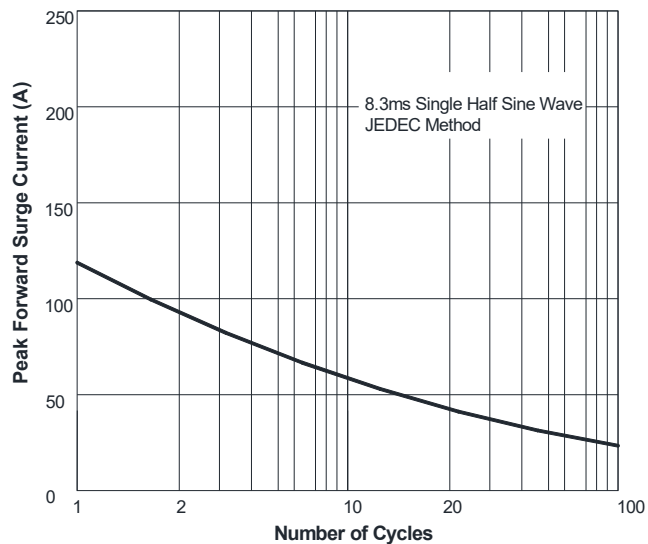


FIG.3: Forward Voltage

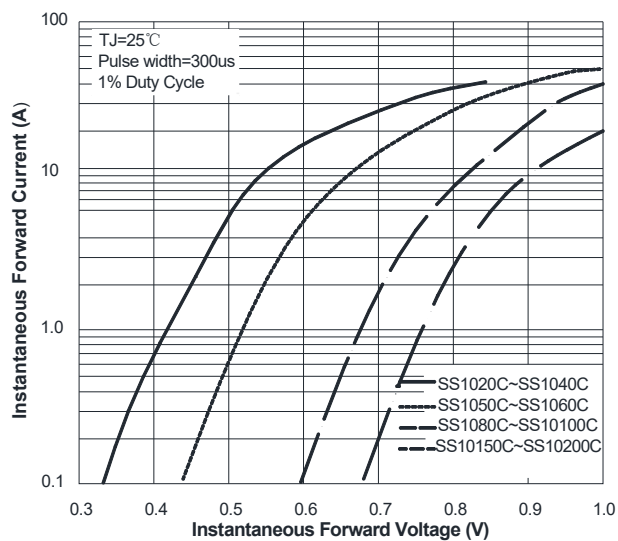


FIG.4: Typical Reverse Characteristics

