

## Surface Mount Schottky Rectifier

### Features

- Guardring for overvoltage protection
- Low forward voltage drop, Low power losses
- High forward surge capability
- AEC-Q101 qualified
- High frequency operation
- Solder dip 260 °C max. 10 s, per JESD 22-B106

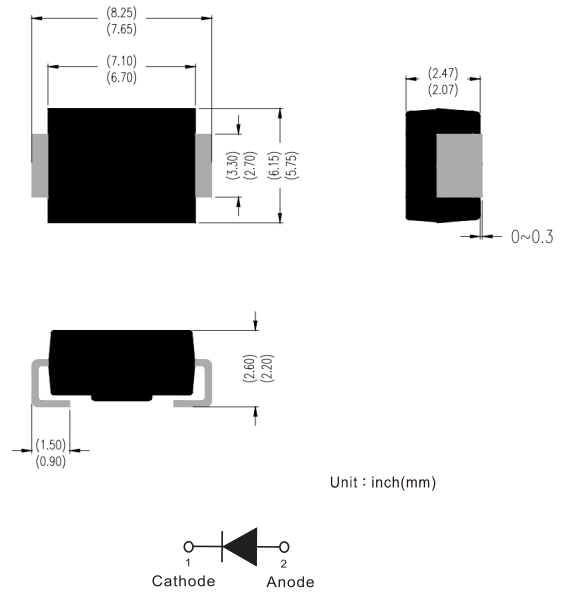
### Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

### Mechanical Data

- **Package:** DO-214AB (SMC)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

### DO-214AB (SMC)



### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SL56C
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	65
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	I <sub>o</sub>	A	5.0
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, Ta=25°C	I <sub>FSM</sub>	A	120
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150

### ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SL56C
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =5.0A	0.52
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	mA	T <sub>a</sub> =25°C	0.1

■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SL56C
Thermal Resistance	Junction to ambient	R <sub>θJ-A</sub>	°C/W	50 <sup>(1)</sup>
	Junction to lead	R <sub>θJ-L</sub>	°C/W	15 <sup>(1)</sup>

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: I<sub>o</sub>-TL Curve

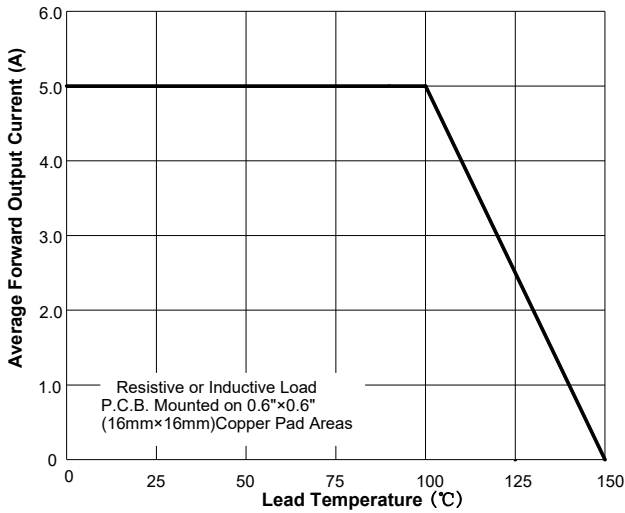


FIG.2: Forward Surge Current Capability

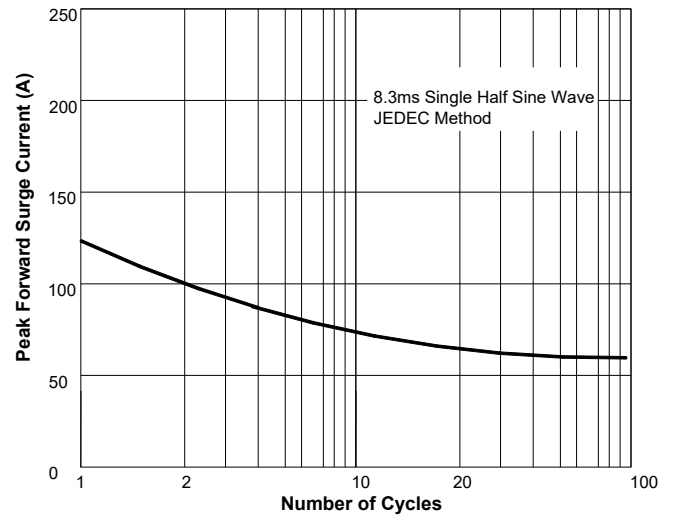


FIG.3: Forward Voltage

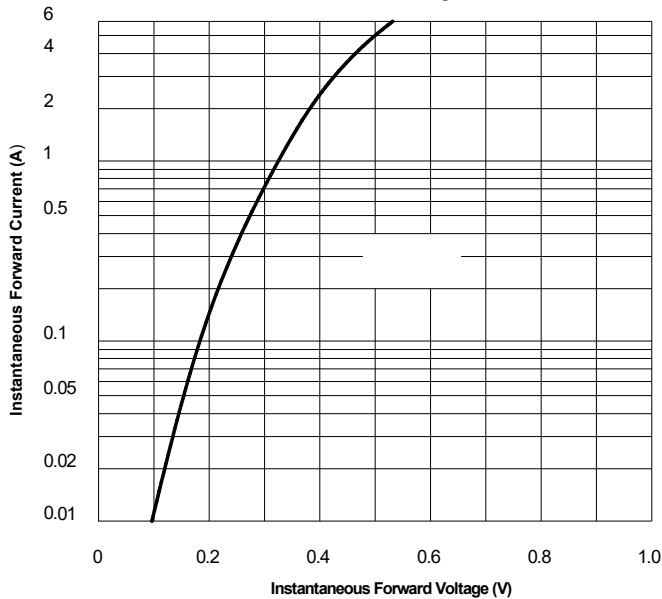


FIG.4: Typical Reverse Characteristics

