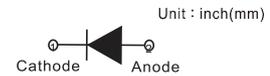
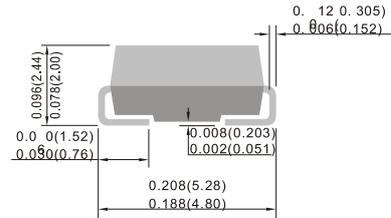
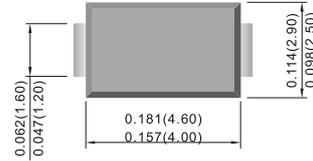


Surface Mount Schottky Rectifier

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

DO-214AC (SMA)



Typical Applications

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

Mechanical Data

- **Package:** DO-214AC (SMA)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

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

PARAMETER	SYMBOL	UNIT	SS12A	SS13A	SS14A	SS15A	SS16A	SS18A	SS110A	SS115A	SS120A	
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	1.0									
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T _a =25°C	I _{FSM}	A	30									
Storage temperature	T _{stg}	°C	-55 ~+150									
Junction temperature	T _j	°C	-55 ~+150					-55 ~+175				

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS							
				12A	13A	14A	15A	16A	18A	110A	115A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.0A	0.55		0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode@ V _{RM} =V _{RRM}	I _{RRM}	mA	T _a =25°C	0.50				0.10			
			T _a =100°C	10				5.0			

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS							
			12A	13A	14A	15A	16A	18A	110A	115A
Thermal resistance	R _{θJ-A}	°C/W	65 ⁽¹⁾							
	R _{θJ-L}		20 ⁽¹⁾							

Note

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics (Typical)

FIG1: I_o -TL Curve

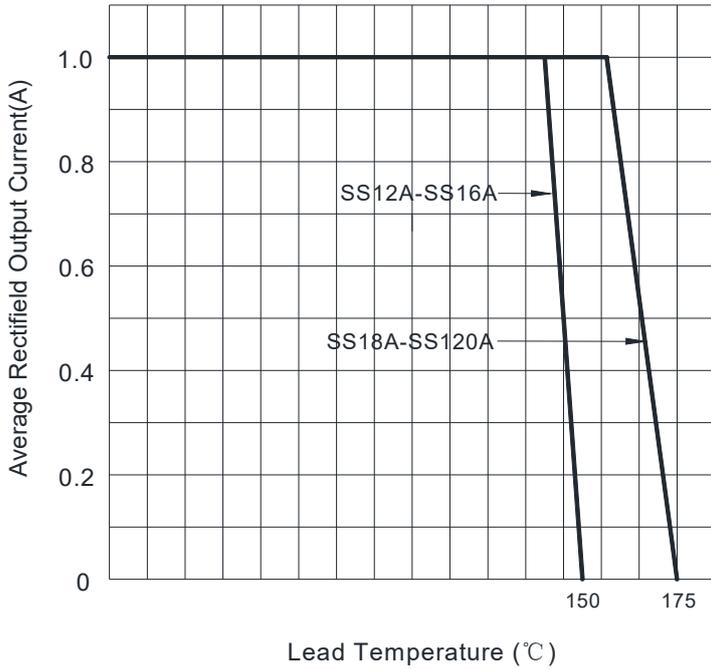


FIG2: Surge Forward Current Capability

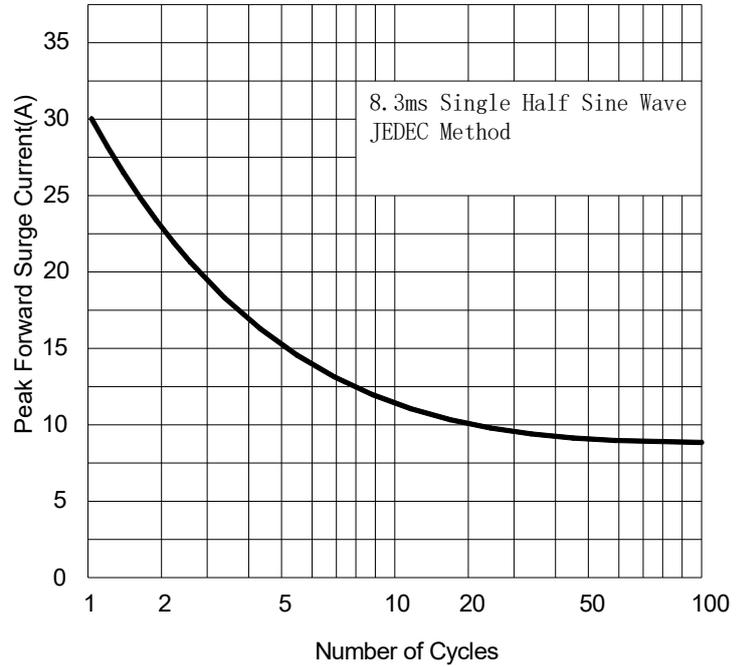


FIG3: TYPICAL FORWARD CHARACTERISTICS

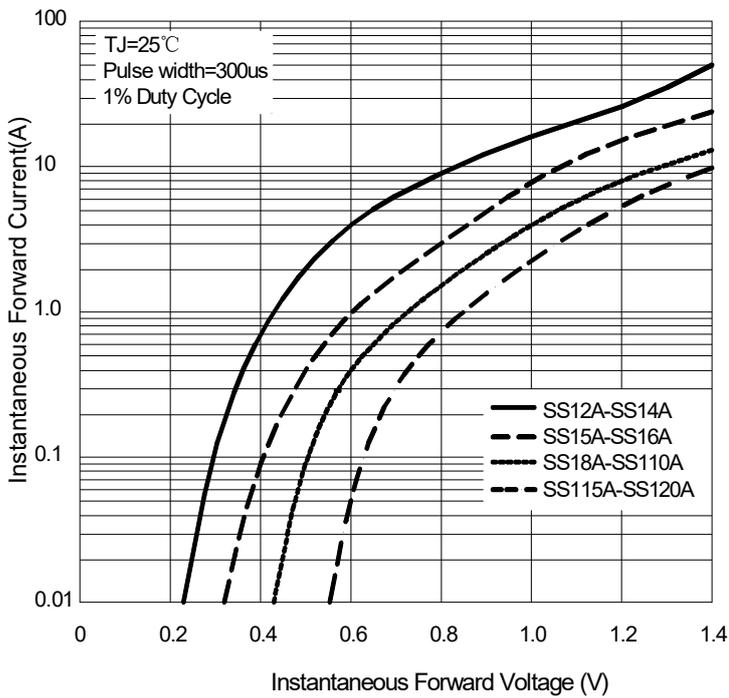


FIG4: Typical Reverse Characteristics

