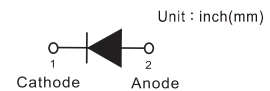
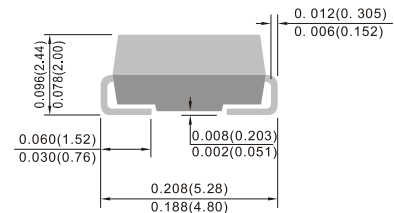
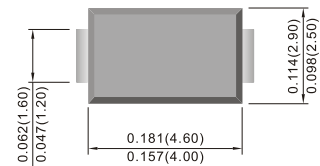


Surface Mount Schottky Rectifier

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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS								
			12A	13A	14A	15A	16A	18A	110A	115A	120A
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, Ta=25°C	I_{FSM}	A	30								
Storage temperature	T_{stg}	°C	-55 ~+150								
Junction temperature	T_j	°C	-55 ~+150					-55 ~+175			

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS								
				12A	13A	14A	15A	16A	18A	110A	115A	120A
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	Ta=25℃	0.50					0.10			
			Ta=100℃	10					5.0			

Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS								
			12A	13A	14A	15A	16A	18A	110A	115A	120A
Thermal resistance	$R_{\theta JA}$	°C/W	65 ⁽¹⁾								
	$R_{\theta JL}$		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: Io-TL Curve

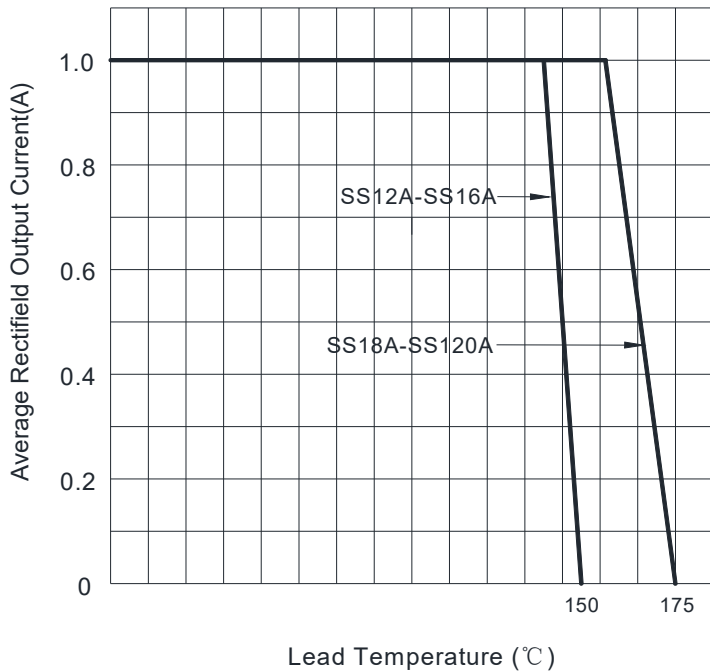


FIG2: Surge Forward Current Capability

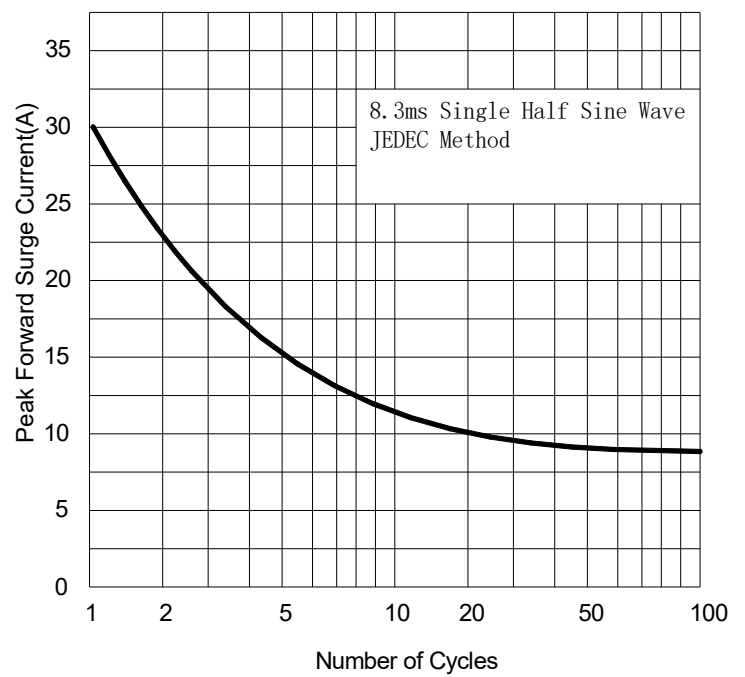


FIG3: TYPICAL FORWARD CHARACTERISTICS

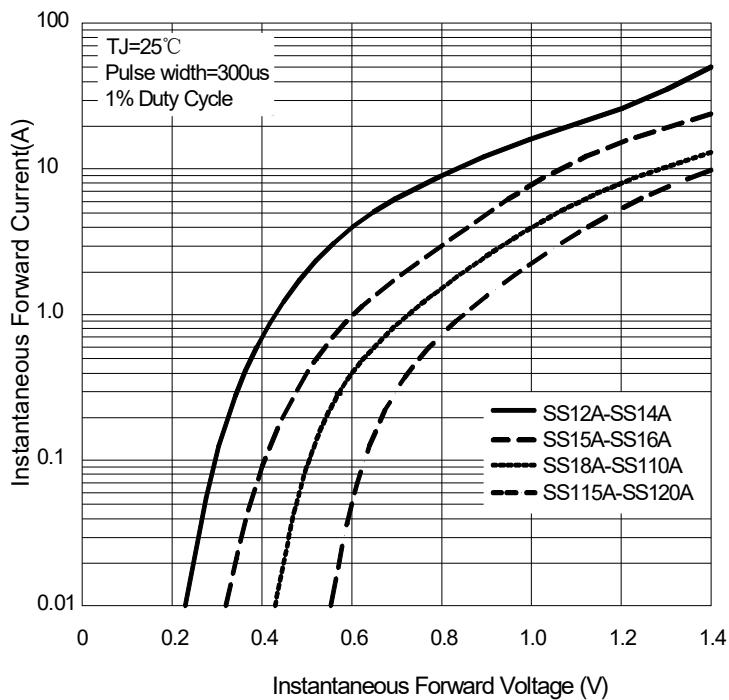


FIG4: Typical Reverse Characteristics

