

Surface Mount Schottky Rectifier

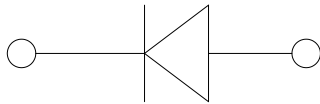


Features

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

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	SS34L	SS36L	SS310L
Device marking code			SS34L	SS36L	SS310L
Repetitive peak reverse voltage	VRRM	V	40	60	100
Average rectified output current @60Hz sine wave, resistance load, T _a (FIG.1)	I _O	A	3.0		
Surge(non-repetitive)forward current @ 60Hz half-sine wave,1 cycle, T _a =25°C	IFSM	A	60		
Storage temperature	T _{stg}	°C	-55 ~+150		
Junction temperature	T _j	°C	-55 ~+150		

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS34L	SS36L	SS310L
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	0.45	0.5	0.6
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =VRRM	I _{RRM}	mA	T _a =25°C	0.50		
			T _a =100°C	10		

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

PARAMETER	SYMBOL	UNIT	SS34L	SS36L	SS310L
Thermal resistance	R _{θJ-A}	°C/W	65 ¹⁾		
	R _{θJ-L}		25 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-T_L Curve

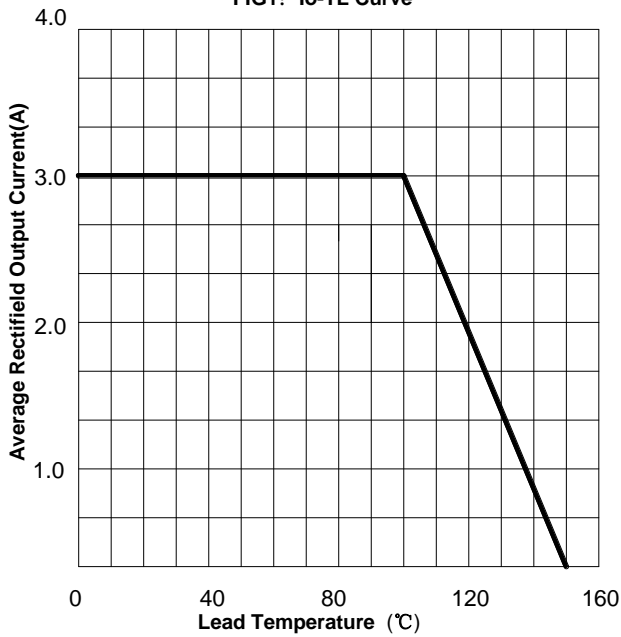


FIG2: Surge Forward Current Capability

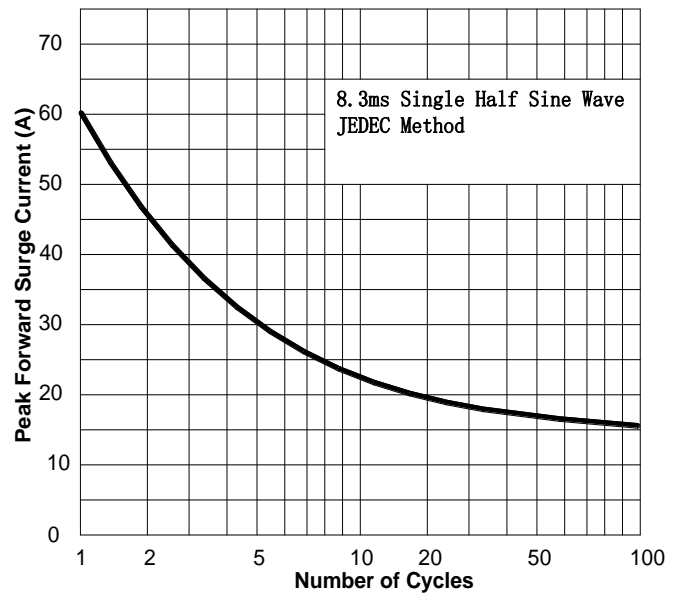


FIG3: Forward Voltage

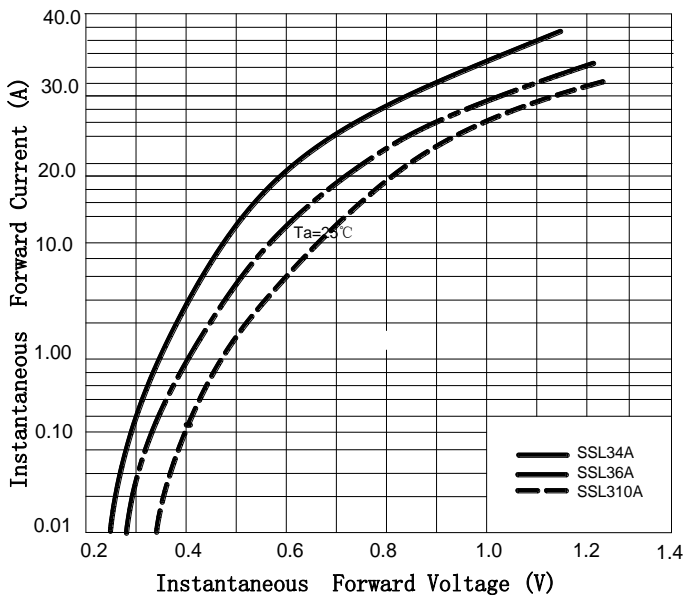
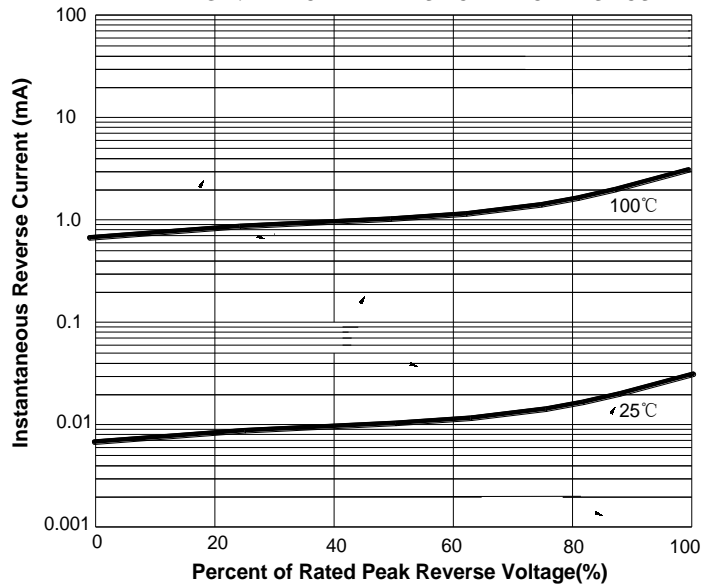
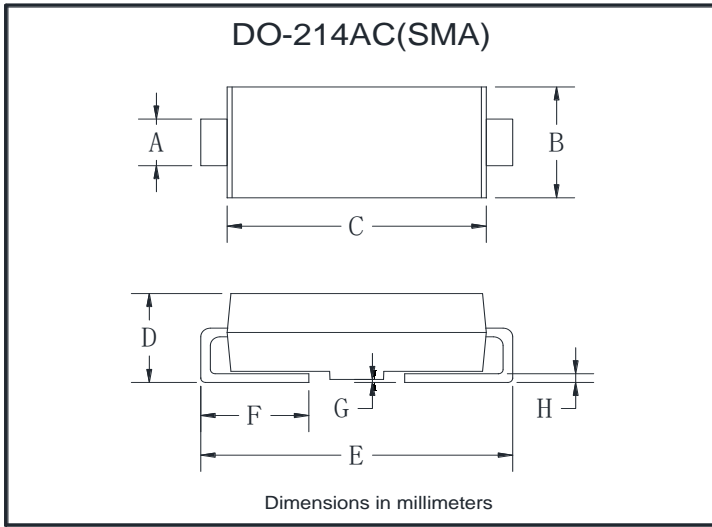


FIG4: TYPICAL REVERSE CHARACTERISTICS

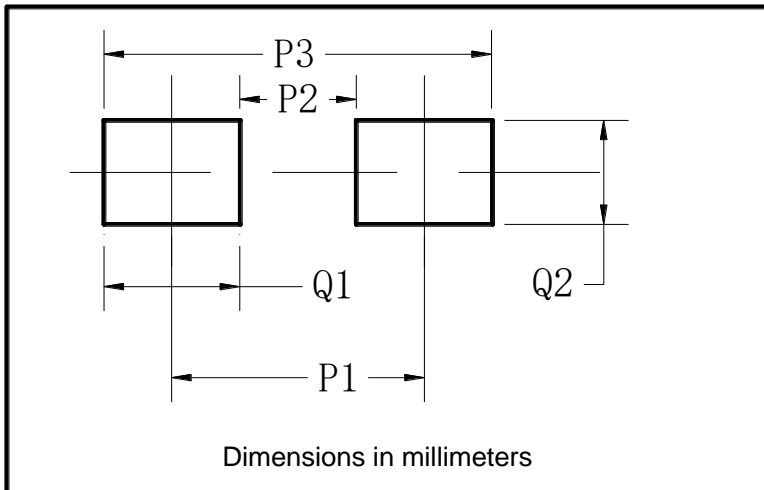


■ Outline Dimensions



DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.25	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.08	0.20
H	0.15	0.31

■ Suggested Pad Layout



DO-214AC(SMA)	
Dim	Millimeters
P1	4.00
P2	1.50
P3	6.50
Q1	2.50
Q2	1.70