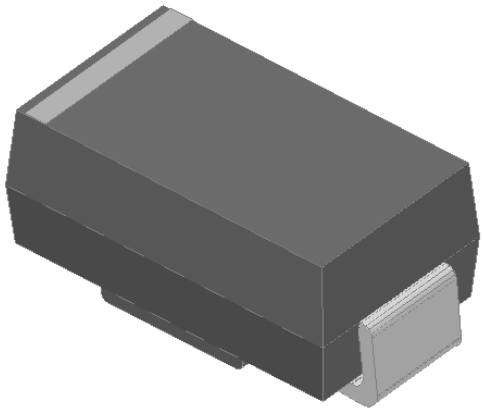
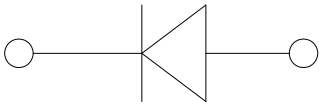
Surface Mount Schottky Rectifier





Features

- N+ IMP， Passivation Dep
- 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

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℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SS								
			32AH	33AH	34AH	35AH	36AH	38AH	310AH	315AH	320AH
Device marking code			SS								
			32AH	33AH	34AH	35AH	36AH	38AH	310AH	315AH	320AH
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, Tc (FIG.1)	I_O	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	70								
Surge(non-repetitive)forward current @1ms, square wave, 1 time, Tj =25℃			140								
Current squared time @1ms≤t≤8.3ms Tj=25℃， Rating of per diode	I^2t	A^2S	20								
Typical junction capacitance@ Measured at 1MHZ and Applied Reverse Voltage of 4.0 V D.C.	Cj	pF	150			128		100		58	
Storage temperature	T_{stg}	℃	-55 ~+175								
Junction temperature	Tj	℃	-55~+150			-55 ~+175					

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	TEST CONDITIONS	MIN	TYP	MAX
Instantaneous forward voltage drop per diode	SS32AH~SS34AH	V_F	V	I_{FM}=3.0A	-	0.46	0.50
	SS35AH~SS36AH				-	0.59	0.70
	SS38AH~SS310AH				-	0.75	0.85
	SS315H~SS320AH				-	0.81	0.90
DC reverse current at rated DC blocking voltage per diode @ V_{RM}=V_{RRM}	SS32AH~SS34AH	I_{RRM}	mA	Tj=25℃	-	-	0.50
				Tj =125℃	-	-	5.0
	SS35AH~SS36AH			Tj=25℃	-	-	0.50
				Tj =125℃	-	-	5.0
	SS38AH~SS310AH			Tj=25℃	-	-	0.10
				Tj =125℃	-		5.0
	SS315H~SS320AH			Tj =25℃	-	-	0.10
				Tj =125℃	-	-	5.0

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SS								
			32AH	33AH	34AH	35AH	36AH	38AH	310AH	315AH	320AH
Thermal resistance	$R_{\theta J-A}$	℃/W	55[1)]								
	$R_{\theta J-L}$		17[1)]								
	$R_{\theta J-C}$		18[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-TC Curve

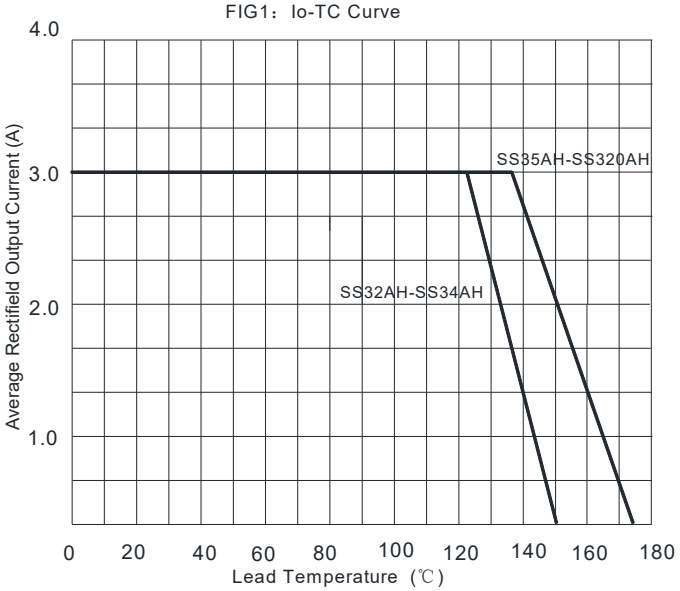


FIG2:Surge Forward Current Capability

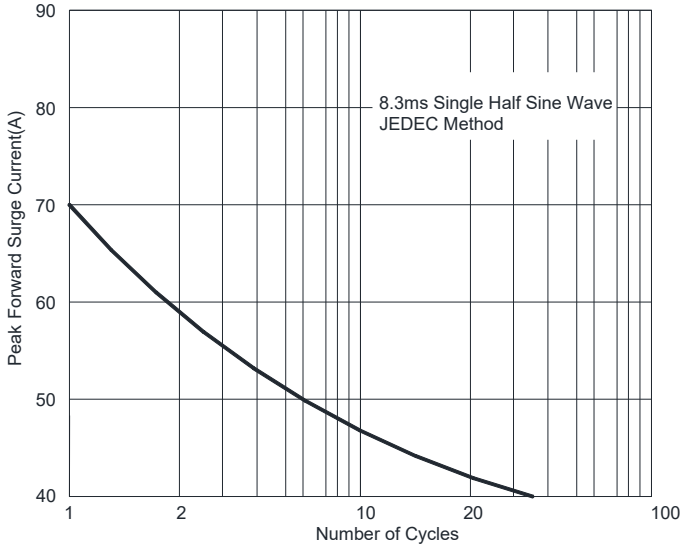


FIG.3: Forward Voltage

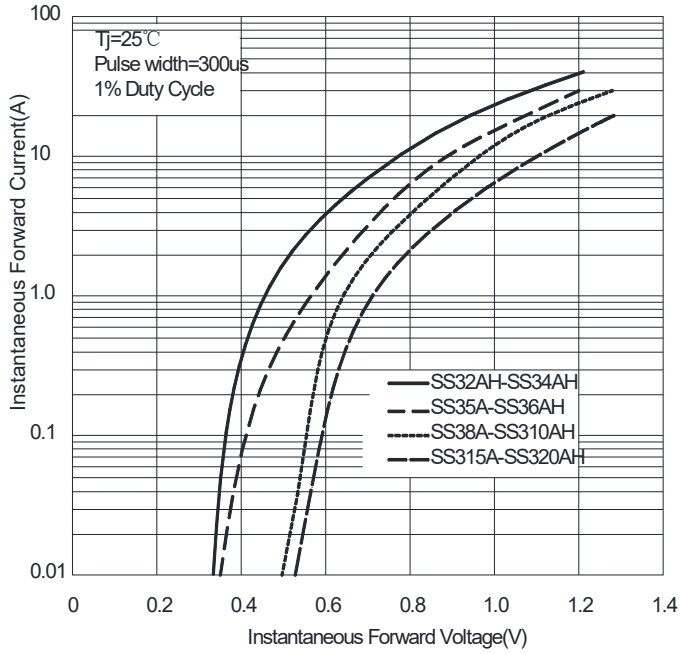


FIG4：**Instantaneous** Reverse Characteristics

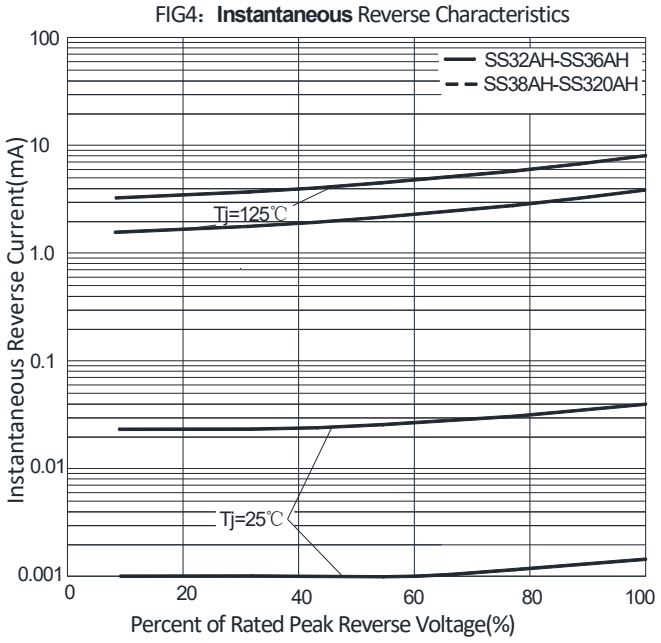
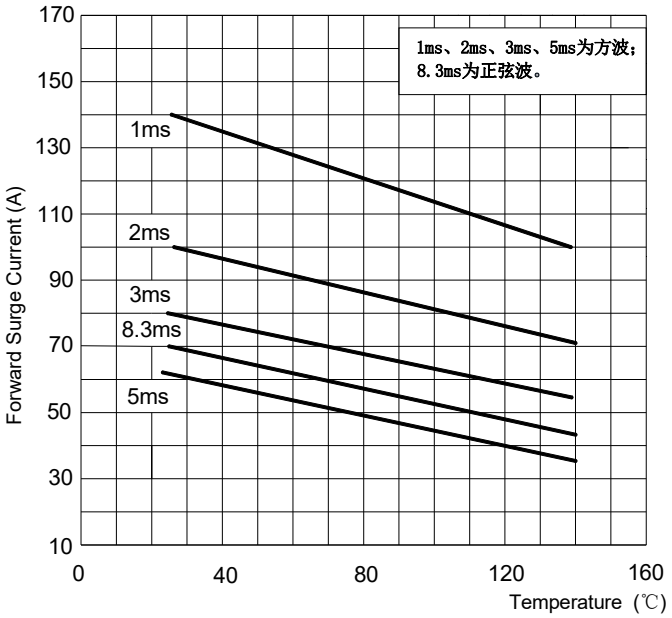
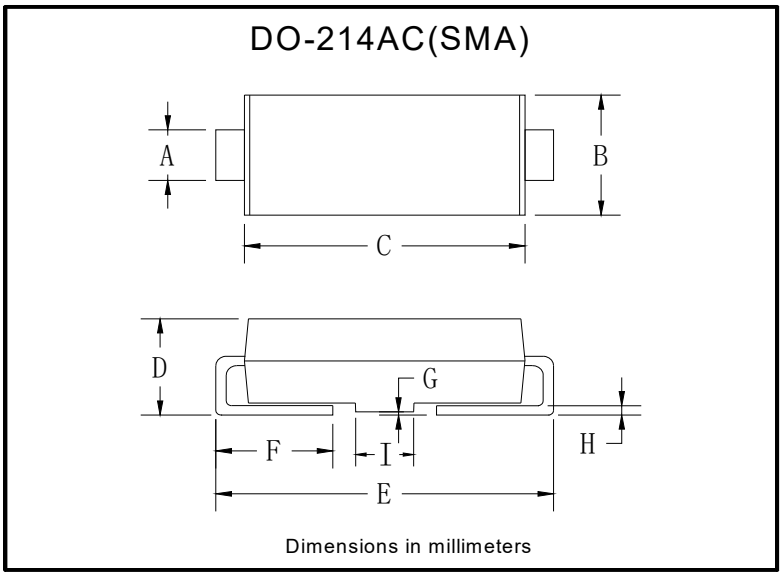


FIG5:Maximum Non-Repititive Peak Forward Current

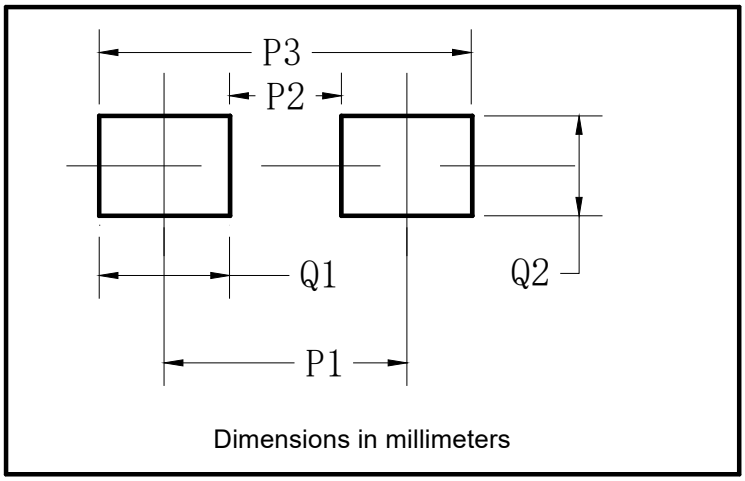


■ Outline Dimensions



DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.00	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.05	0.20
H	0.15	0.31
I	1.70	2.10

■Suggested Pad Layout



Dimensions in millimeters

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

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