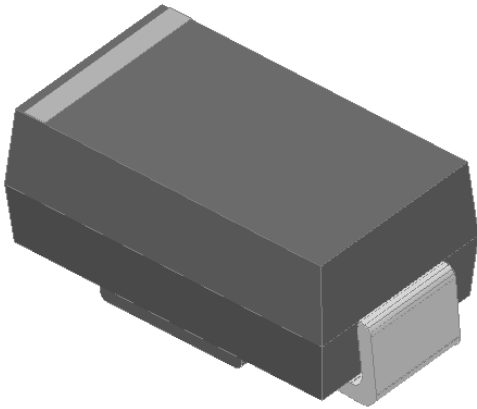


Surface Mount Schottky Rectifier

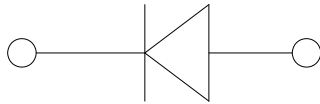


Features

- 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
- Part no. with suffix "Q" means AEC-Q101 qualified

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, automotive 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								
			22AQ	23AQ	24AQ	25AQ	26AQ	28AQ	210AQ	215AQ	220AQ
Device marking code			SS								
			22A	23A	24A	25A	26A	28A	210A	215A	220A
Repetitive Peak Reverse Voltage	V _{RRM}	V	20	30	40	50	60	80	100	150	200
Average Rectified Output Current @60Hz Half-sine wave, Resistance load, T _L (Fig.1)	I _O	A	2.0								
Surge(Non-repetitive)Forward Current @ 60Hz Half-sine wave,1 cycle, Ta=25°C	I _{FSM}	A	75								
Junction Temperature	T _J	°C	-55~+125				-55 ~+150				
Storage Temperature	T _{stg}	°C	-55 ~+150								

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS								
				22AQ	23AQ	24AQ	25AQ	26AQ	28AQ	210AQ	215AQ	220AQ
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	0.50			0.70		0.85		0.90	
Maximum DC reverse current at rated DC blocking voltage per diode@ V _{RM} =V _{RRM}	I _{RRM}	mA	Ta=25°C	0.50					0.10			
			Ta=100°C	10			5		-			
			Ta=125°C	-			-		5			
Typical junction capacitance	C _J	pF	VR=4V,f=1MHz	115			95		60		40	



SS22AQ THRU SS220AQ

■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS								
			22AQ	23AQ	24AQ	25AQ	26AQ	28AQ	210AQ	215AQ	220AQ
Thermal Resistance	$R_{\theta J-A(1)}$	$^{\circ}\text{C/W}$	75								
	$R_{\theta J-L(1)}$		17								

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)

Fig.1: I_O-T_L Curve

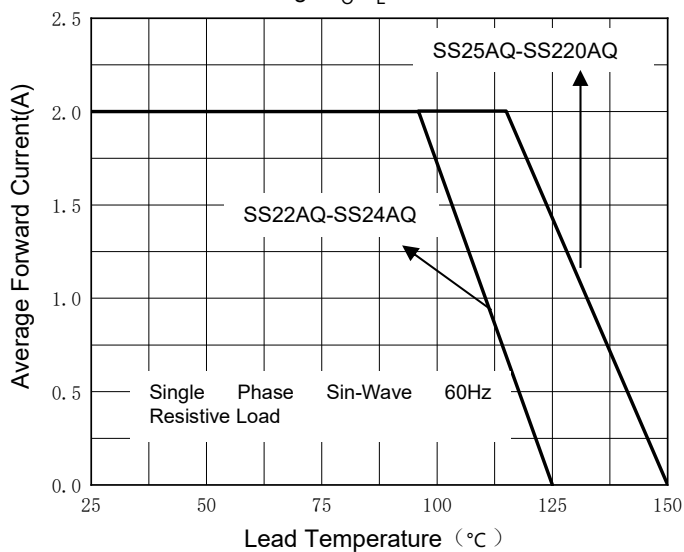


Fig.2: Surge Forward Current Capability

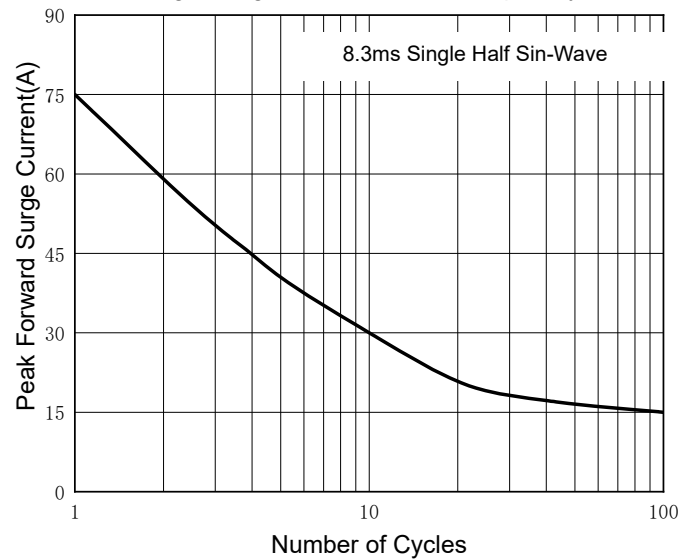


Fig.3: Forward Voltage

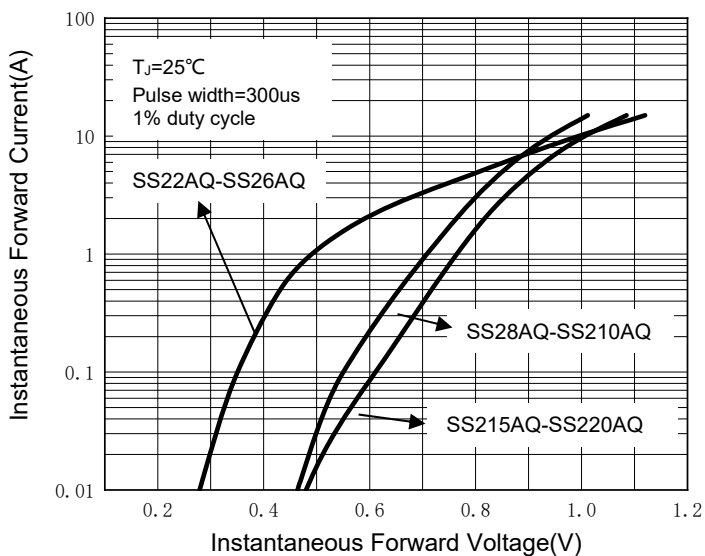
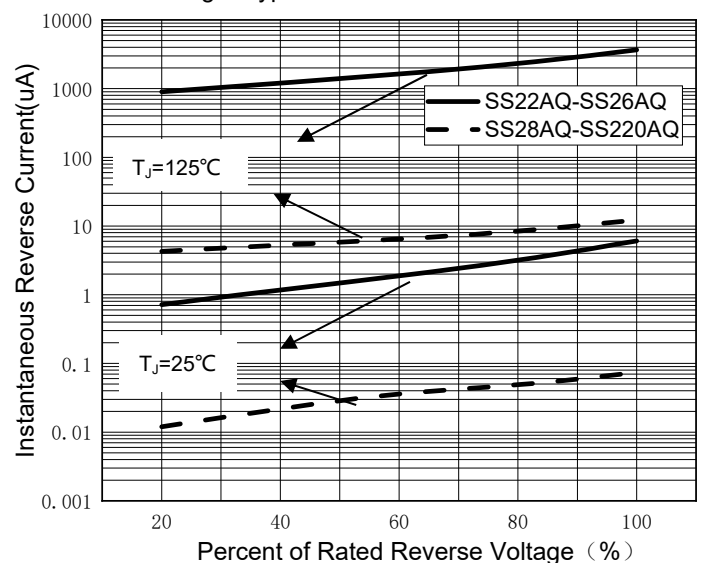


Fig.4: Typical Reverse Characteristics



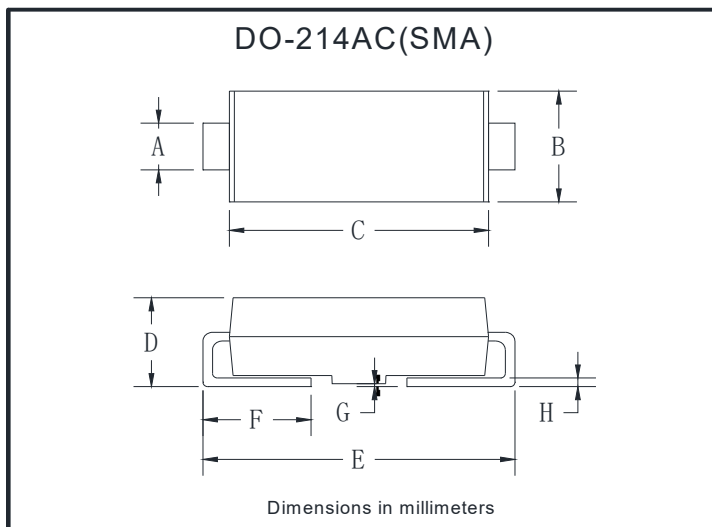
■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS22AQ- SS220AQ	F2	Approximate 0.067	7500	15000	120000	13" reel



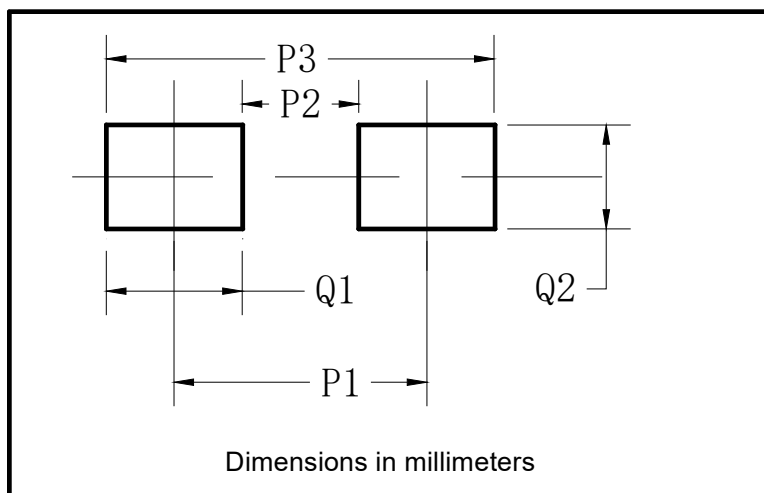
SS22AQ THRU SS220AQ

■ 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



SS22AQ THRU SS220AQ

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