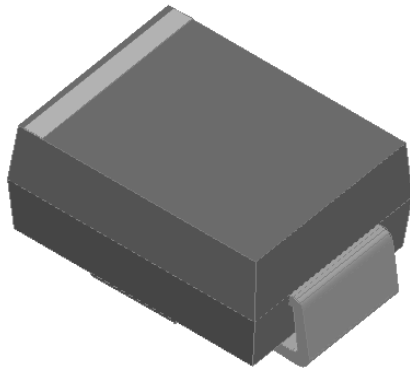


Surface Mount Schottky Rectifier

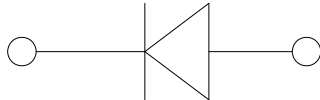


Features

- Guard ring for overvoltage protection
- Low power losses
- Extremely fast switching
- High forward surge capability
- High frequency operation
- 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-214AA (SMB)
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 32BQ	SS 33BQ	SS 34BQ	SS 35BQ	SS 36BQ	SS 38BQ	SS 310BQ	SS 315BQ	SS 320BQ
Device marking code			SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
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, T _L (Fig.1)	I _O	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Ta=25°C	I _{FSM}	A	70								
Storage temperature	T _{stg}	°C	-55 ~+150								
Junction temperature	T _J	°C	-55~+125				-55 ~+150				

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS 32BQ	SS 33BQ	SS 34BQ	SS 35BQ	SS 36BQ	SS 38BQ	SS 310BQ	SS 315BQ	SS 320BQ
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=3.0A	0.50			0.70		0.85		0.90	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I _{RRM}	mA	Ta=25°C	0.50					0.10			
			Ta=100°C	10					5			
Typical junction capacitance	C _J	pF	VR=4V,f=1MHz	148			134		96		62	



SS32BQ THRU SS320BQ

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

PARAMETER	SYMBOL	UNIT	SS 32BQ	SS 33BQ	SS 34BQ	SS 35BQ	SS 36BQ	SS 38BQ	SS 310BQ	SS 315BQ	SS 320BQ
Thermal resistance	$R_{\theta J-A}$	°C/W	63 ⁽¹⁾								
	$R_{\theta J-L}$		23 ⁽¹⁾								

Note:
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16mm) copper pad areas

■ Characteristics(Typical)

Fig.1: I_O - T_L Curve

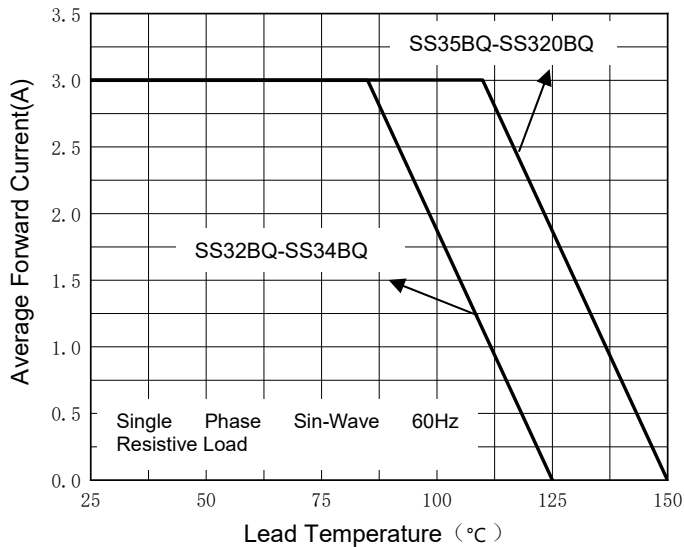


Fig.2: Surge Forward Current Capability

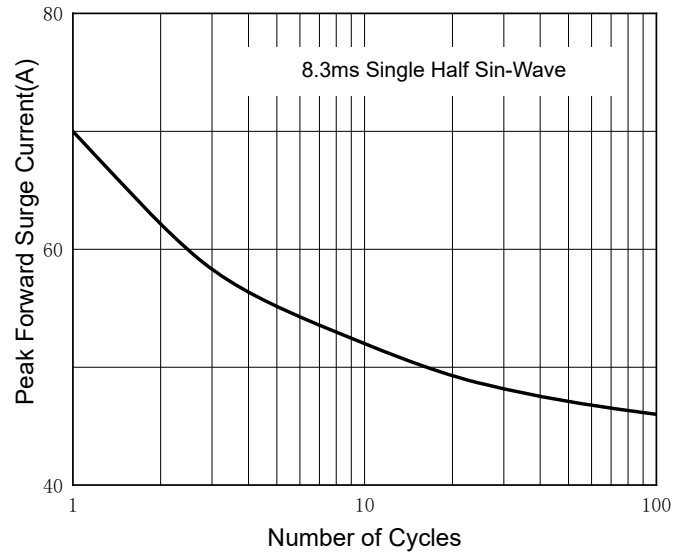


Fig.3: Forward Voltage

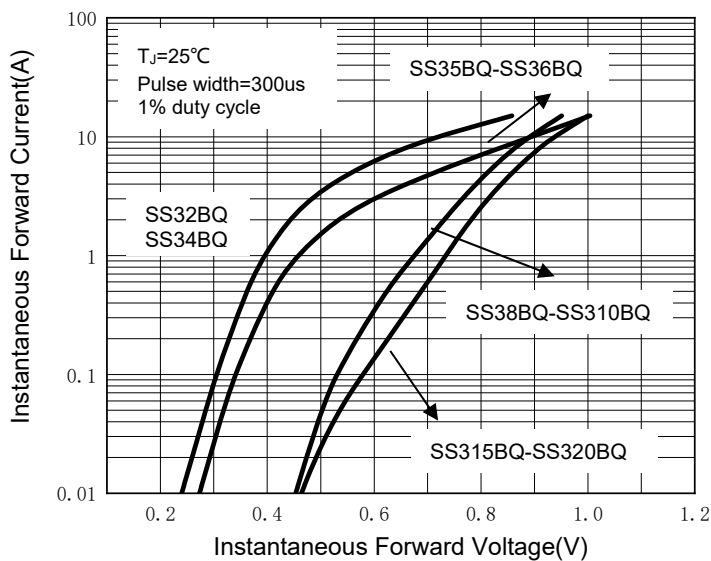
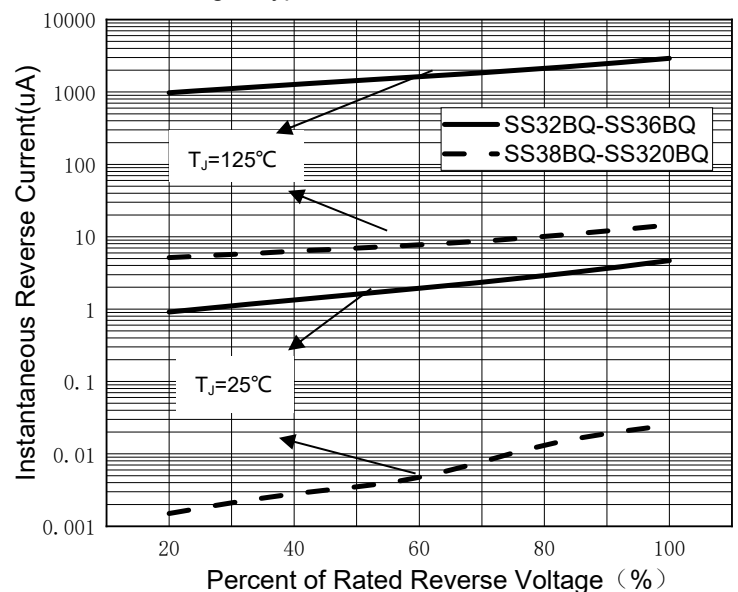


Fig.4: Typical Reverse Characteristics



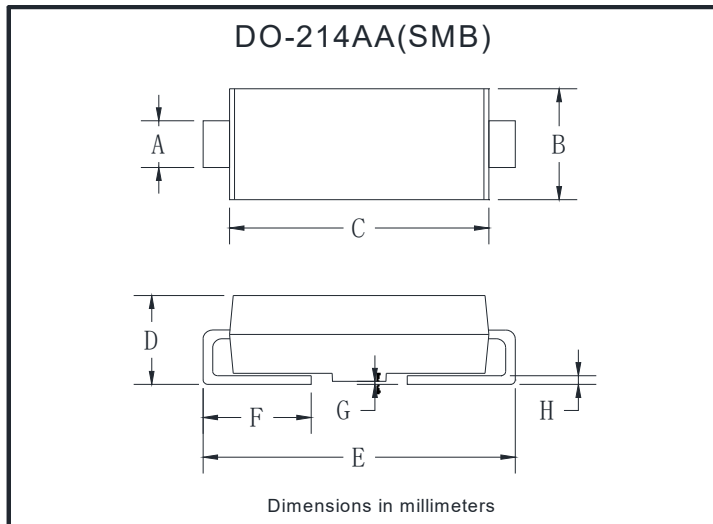


SS32BQ THRU SS320BQ

■ Ordering Information (Example)

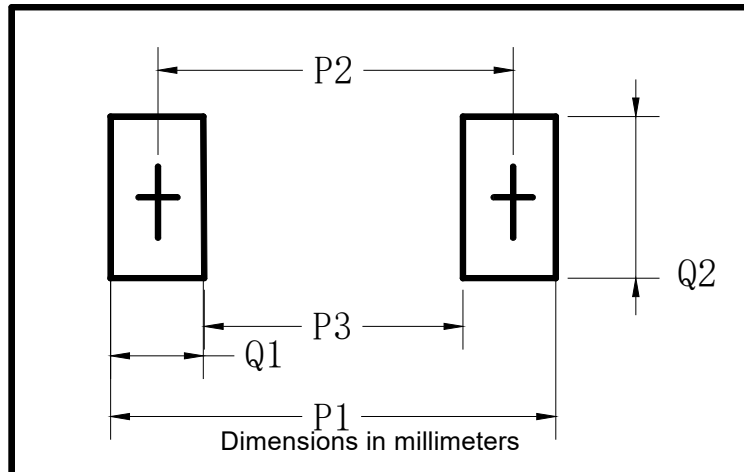
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS32BQ-SS320BQ	F1	Approximate 0.1003	3000	6000	48000	13" reel

■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.15
B	3.30	3.94
C	4.25	4.75
D	1.99	2.61
E	5.21	5.59
F	0.90	1.41
G	0.10	0.20
H	0.15	0.31

■ Suggested pad layout



DO-214AA(SMB)	
Dim	Millimeters
P1	6.8
P2	4.3
P3	1.8
Q1	2.5
Q2	2.3



SS32BQ THRU SS320BQ

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, lifesaving, lifesustaining, or military. Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.