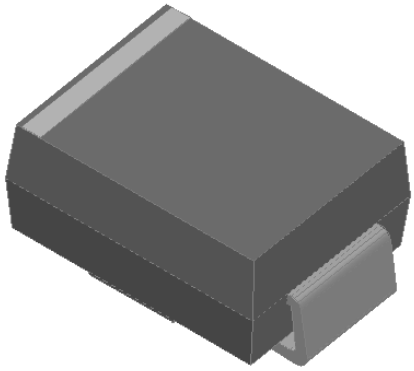
Surface Mount Schottky Rectifier

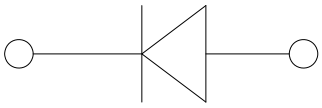


Features

- 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℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SS36BQ
Device marking code			SS36B
Repetitive peak reverse voltage	V_{RRM}	V	60
Maximum RMS voltage	V_{RMS}	V	42
Maximum DC blocking voltage	V_{DC}	V	60
Maximum average forward rectified current at T_L (Fig.1)	I_O	A	3.0
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T_J=25℃	I_{FSM}	A	80
Voltage rate of change (rated V_R)	dV/dt	V/μs	10000
Storage temperature	T_{stg}	℃	-55 ~+150
Junction temperature and storage temperature	T_J	℃	-55 ~+150

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

PARAMETER	SYMBOL	TEST CONDITIONS		TYP	MAX	UNIT
Instantaneous forward voltage	V_F	I_F=3A	T_J=25℃	0.6	0.7	V
			T_J=125℃	0.54	0.63	
Reverse current	I_R	Rated V_R	T_J=25℃	7	100	μA
			T_J=125℃	-	10	mA
Typical junction capacitance	C_J	V_R=4V,f=1MHz		135	-	pF

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

PARAMETER	SYMBOL	UNIT	SS36BQ
Thermal Resistance	$R_{\theta J-A}$	℃/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:Forward Current Derating Curve

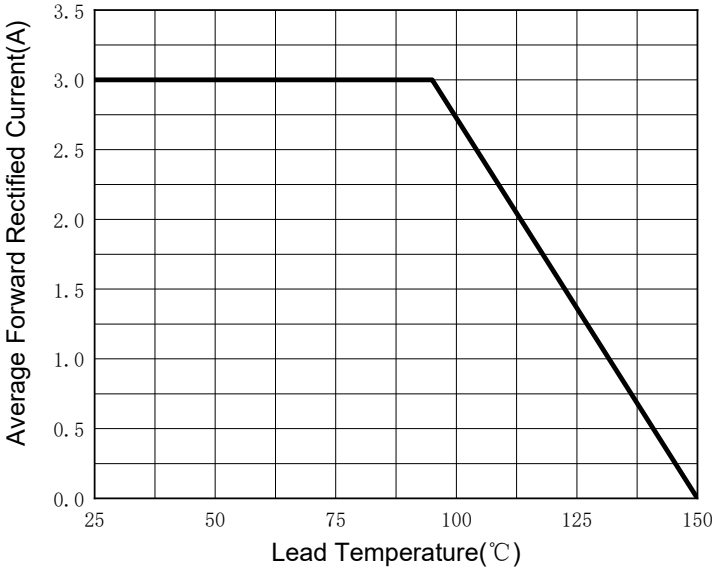


Fig.2:Maximum Non-Repetitive Peak Forward Surge Current

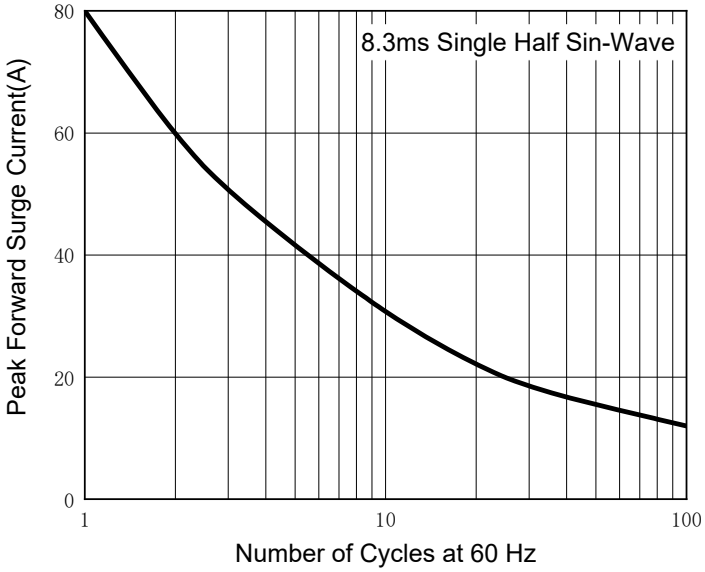


Fig.3:Typical Instantaneous Forward Characteristics

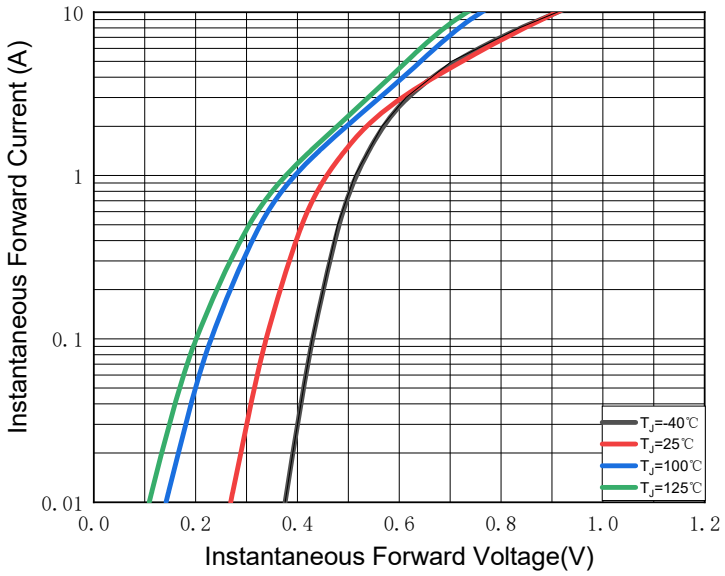


Fig.4:Typical Reverse Leakage Characteristics

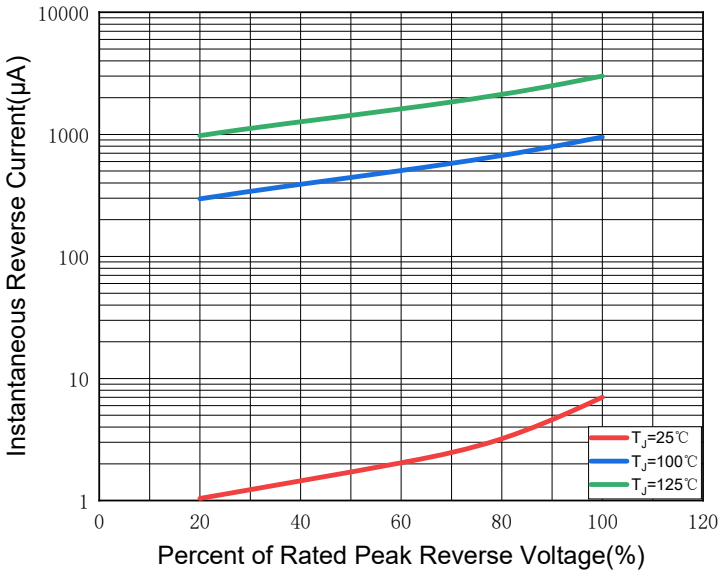
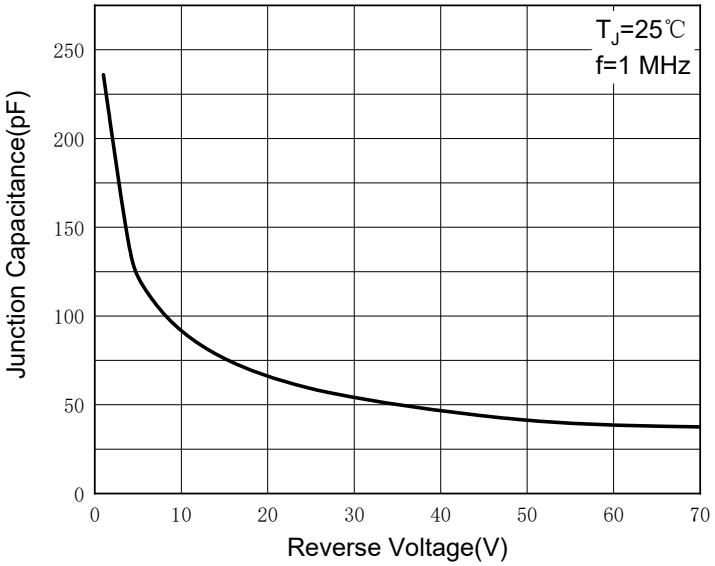
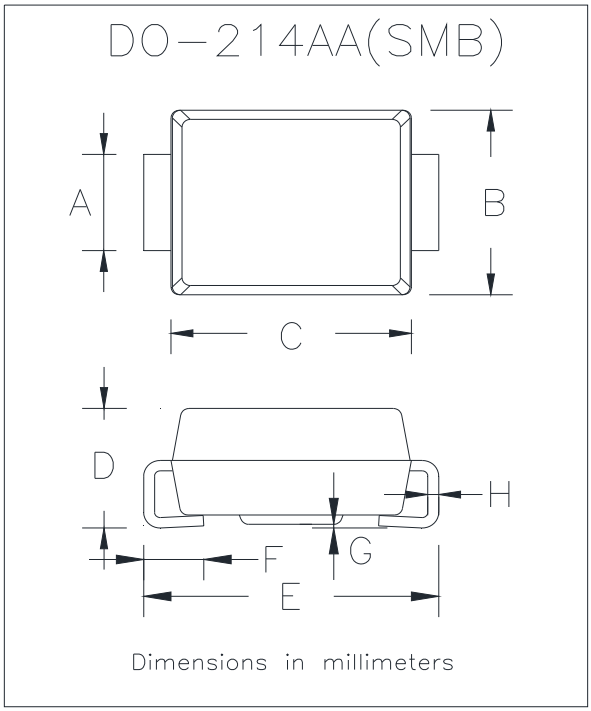


Fig.5:Typical Junction Capacitance

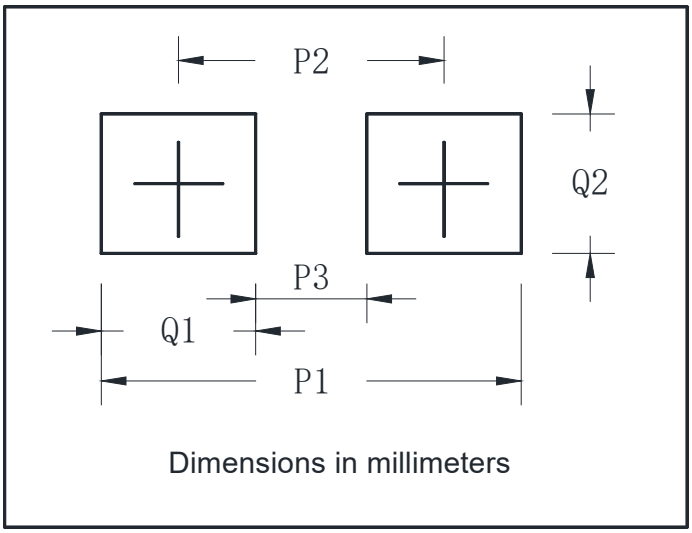


■ Outline Dimensions



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.15
B	3.30	3.94
C	4.05	4.75
D	1.99	2.61
E	5.21	5.59
F	0.90	1.41
G	0.05	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

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS36BQ	F1	Approximate 0.1003	3000	48000	13” reel

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, lifesust aining,or military,Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improp er use of sale.

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