

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

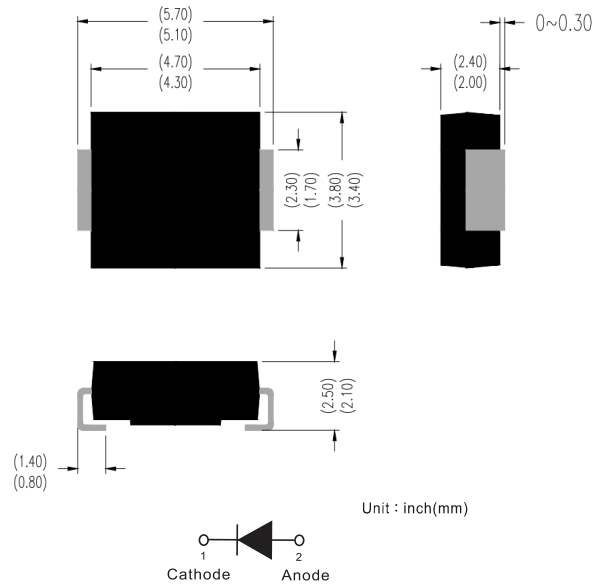
Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, 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

DO-214AA (SMB)



■ Maximum Ratings (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | SS52 | SS53 | SS54 | SS55 | SS56 | SS58 | SS510 | SS515 | SS520 | |
|---|------------------|------|-----------|------|------|------|------|-----------|-------|-------|-------|--|
| 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, TL (FIG.1) | I _O | A | 5.0 | | | | | | | | | |
| Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T _a =25°C | I _{FSM} | A | 100 | | | | | | | | | |
| Storage temperature | T _{stg} | °C | -55 ~+150 | | | | | | | | | |
| Junction temperature | T _J | °C | -55 ~+150 | | | | | -55 ~+175 | | | | |

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

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | SS52 | SS53 | SS54 | SS55 | SS56 | SS58 | SS510 | SS515 | SS520 |
|---|------------------|------|-----------------------|------|------|------|------|------|------|-------|-------|-------|
| Maximum instantaneous forward voltage drop per diode | V _F | V | I _{FM} =5.0A | 0.55 | | | 0.70 | | 0.85 | | 0.95 | |
| Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM} | I _{RRM} | mA | T _a =25°C | 0.5 | | | | | 0.1 | | | |
| | | | T _a =100°C | 10 | | | | | 5 | | | |

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

| PARAMETER | SYMBOL | UNIT | SS52 | SS53 | SS54 | SS55 | SS56 | SS58 | SS510 | SS515 | SS520 |
|--------------------|-------------------|------|------------------|------|------|------|------|------|-------|-------|-------|
| Thermal resistance | R _{θJ-A} | °C/W | 58 ¹⁾ | | | | | | | | |
| | R _{θJ-L} | | 20 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 16 mm) copper pad areas

■ Characteristics(Typical)

FIG1: Io-TL Curve

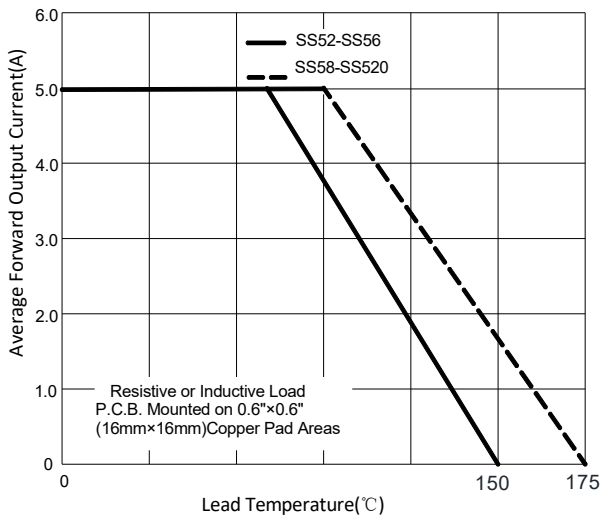


FIG2: Surge Forward Current Capability

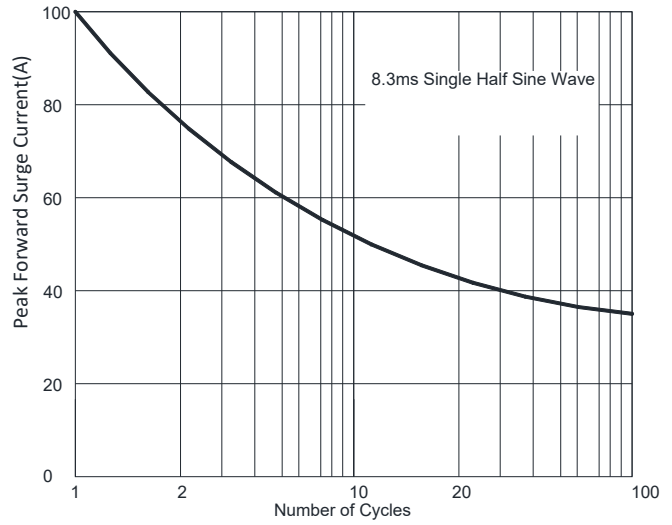


FIG3: Forward Voltage

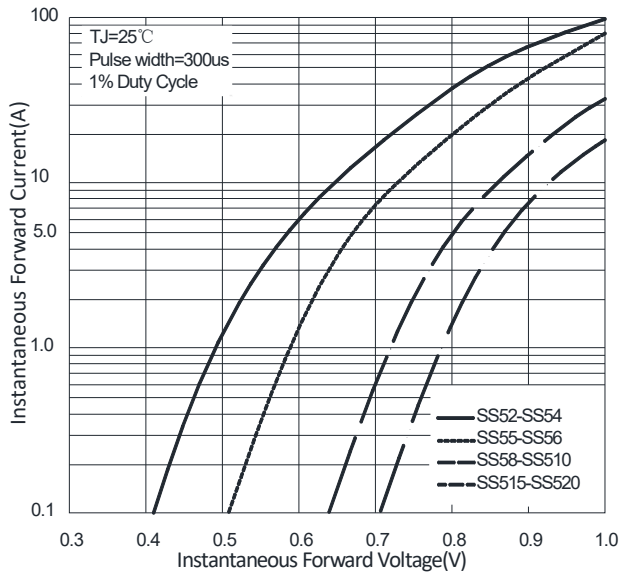
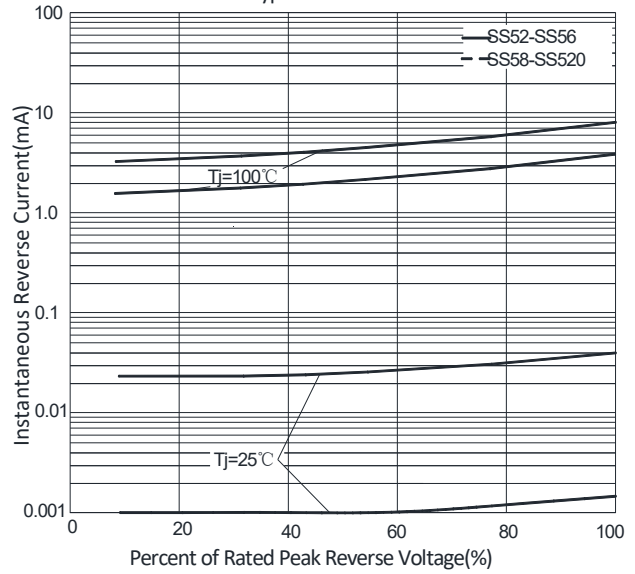


FIG4: Typical Reverse Characteristics



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [DOWO](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [BAS16E6433HTMA1](#) [BAT 54-02LRH E6327](#)
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SK310-T](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [GA01SHT18](#)
[CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [JANTX1N5712-1](#) [DMJ3940-000](#)
[SB007-03C-TB-E](#) [SK33B-TP](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#)
[ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#)
[ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVBM120ET1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#)
[B0530WSQ-7-F](#) [PDS1040Q-13](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [B140S1F-7](#)