

SMA Surface Mount Schottky Barrier Rectifier

Features

- For surface mounted applications
- High forward surge current capability
- Low power loss,high efficiency
- Metal silicon junction, majority carrier conduction
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

Reverse Voltage
40~100 V
Forward Current
5 Ampere

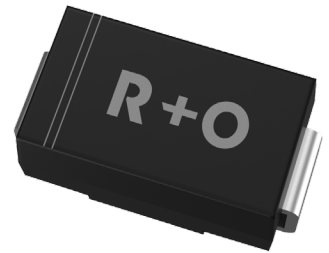
Applications

For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications.

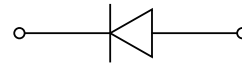
Mechanical Data

- Case: DO-214AC(SMA)
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Cathode line denotes the cathode end

DO-214AC(SMA)



Function Diagram



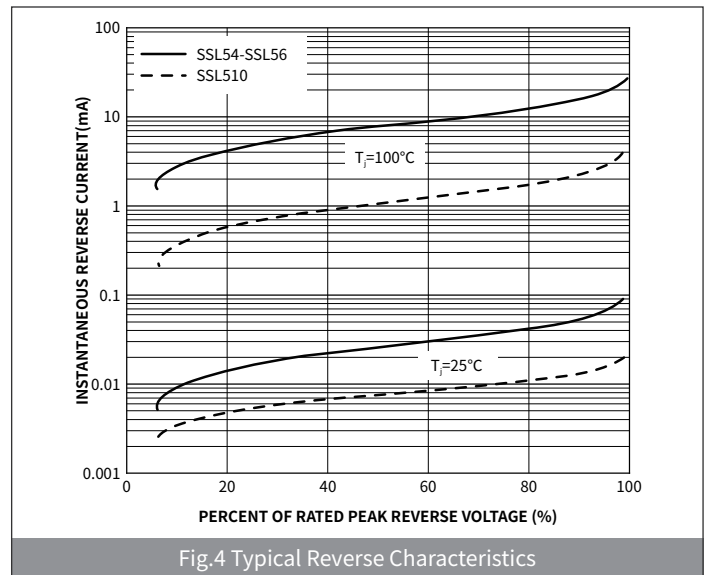
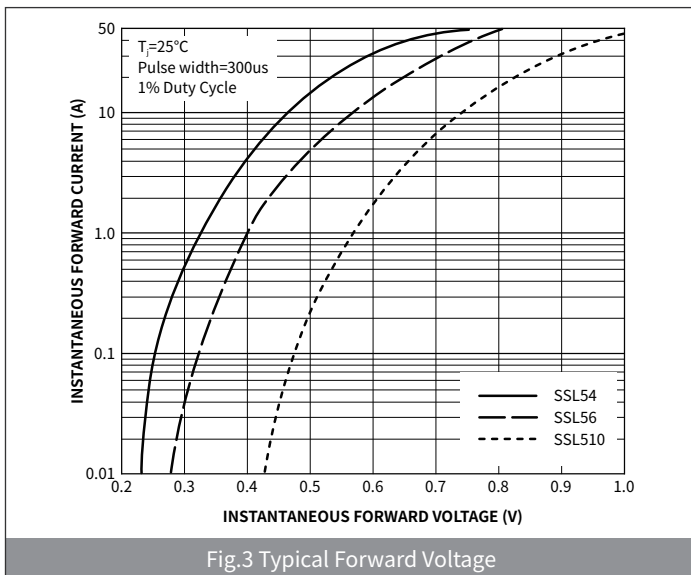
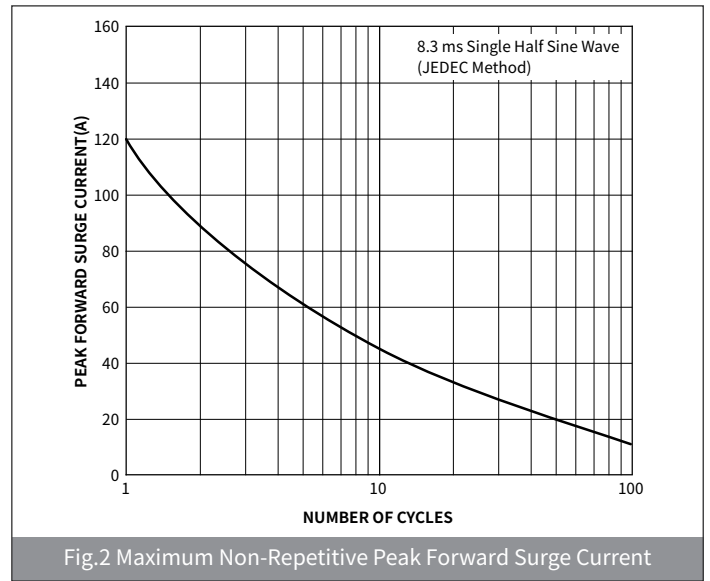
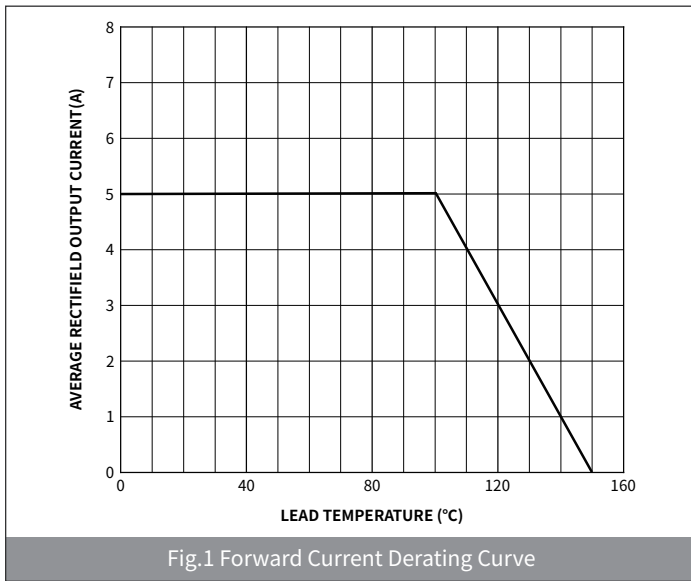
Maximum Ratings (Ta=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | SSL54 | SSL56 | SSL510 |
|---|------------------|-------|------------|-------|--------|
| Device marking code | | | SSL54 | SSL56 | SSL510 |
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | V | 40 | 60 | 100 |
| Maximum RMS Voltage | V_{RMS} | V | 28 | 42 | 70 |
| Maximum DC blocking Voltage | V_{DC} | V | 40 | 60 | 100 |
| Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load,TL=100°C | $I_{F(AV)}$ | A | 5.0 | | |
| Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave | I_{FSM} | A | 120 | | |
| Storage temperature | T_{stg} | °C | -55 ~ +150 | | |
| Junction temperature | T_j | °C | -55 ~ +150 | | |
| Typical Thermal Resistance | $R_{\theta J-A}$ | °C /W | 80 | | |
| | $R_{\theta J-L}$ | °C /W | 25 | | |

● Electrical Characteristics (Ta=25°C Unless otherwise noted)

| PARAMETER | TEST CONDITIONS | SYMBOL | UNIT | SSL54 | SSL56 | SSL510 |
|---|-------------------------------|----------|------|-------|-------|--------|
| Maximum instantaneous forward voltage | $I_F=5.0A$ | V_F | V | 0.48 | 0.55 | 0.70 |
| Maximum DC reverse current at rated DC blocking voltage | $V_R=V_{DC}, T_A=25^\circ C$ | I_{R1} | mA | 0.5 | | 0.2 |
| | $V_R=V_{DC}, T_A=100^\circ C$ | I_{R2} | | 50 | | 20 |
| Typical junction capacitance | 4.0V DC, 1MHz | C_J | pF | 380 | 220 | 680 |

● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



SSL54 THRU SSL510

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

● Ordering Information

| PACKAGE | PACKAGE CODE | UNIT WEIGHT(g) | REEL(pcs) | BOX(pcs) | CARTON(pcs) | DELIVERY MODE |
|---------|--------------|----------------|-----------|----------|-------------|---------------|
| SMA | R2 | 0.07 | 5000 | 10000 | 80000 | 11" |
| SMA | R3 | 0.07 | 7500 | 15000 | 120000 | 13" |

● Package Outline Dimensions (SMA/DO-214AC)

| Symbol | Dimensions | | | |
|--------|-------------|-------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 1.25 | 1.65 | 0.049 | 0.065 |
| B | 3.95 | 4.65 | 0.156 | 0.183 |
| C | 2.35 | 2.85 | 0.093 | 0.112 |
| D | 1.98 | 2.41 | 0.078 | 0.095 |
| E | 0.76 | 1.52 | 0.030 | 0.060 |
| F | - | 0.203 | - | 0.008 |
| G | 4.70 | 5.30 | 0.185 | 0.209 |
| H | 0.15 | 0.31 | 0.006 | 0.012 |

● Suggested Pad Layout

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| M | 1.70 | - | 0.067 | - |
| J | 2.10 | - | 0.082 | - |
| K | - | 2.30 | - | 0.090 |

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 [hongjiacheng](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [RKS100KG#P1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#)
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [SB10-04A3-BT](#) [SBM30-03-TR-E](#) [SBS811-S-TL-E](#) [SBS818-TL-E](#) [SS3003CH-TL-E](#)
[STPS30S45CW](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [IDL08G65C5](#) [JANTX1N5712-1](#) [SB007-](#)
[03C-TB-E](#) [SB10015M-TL-E](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [STPS40SM100CG-TR](#) [CRG04\(T5L,TEMQ\)](#)
[ACDBA240-HF](#) [CDBQC0530L-HF](#) [STPS40SM120CTN](#) [NRVBM120ET1G](#) [STPS2545CGY-TR](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [BAS 70-](#)
[07 E6433](#) [HSM560Je3/TR13](#) [HSM190Je3/TR13](#) [B330AF-13](#) [ACDBUC0230-HF](#) [MBR10200CTF-G1](#) [CDLL5712](#) [DMF2822-000](#) [VS-](#)
[50WQ04FNTRL-M3](#) [1N5817-G](#) [B350AF-13](#) [MF300A06F2](#) [SEMIX302KD16S](#) [5082-2835](#)