



ULTRA LOW VF SCHOTTKY RECTIFIER

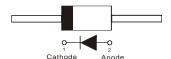
VOLTAGE 45 Volt CURRENT 8 Ampere

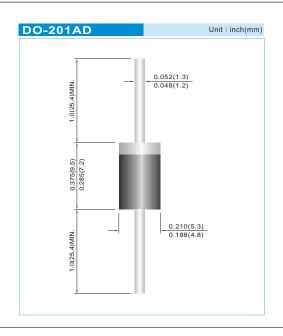
FEATURES

- Ultra low forward voltage drop, low power losses
- · High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Molded plastic, DO-201AD
- Terminals : Axial leads, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- Approx weight: 0.0402 ounces, 1.142 grams





MAXIMUM RATINGS(TA=25°C unless otherwise noted)

| PARAMETER | | SYMBOL | VALUE | UNIT |
|---|----------|--------------|--------------|------|
| Maximum repetitive peak reverse voltage | | VRRM | 45 | V |
| Maximum rms voltage | | VRMS | 32 | V |
| Maximum dc blocking voltage | | VR | 45 | V |
| Maximum average forward rectified current | | I F(AV) | 8 | Α |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load | | IFSM | 150 | Α |
| Typical thermal resistance | (Note 1) | R⊕ja R⊕jl | 40 23 | °C/W |
| Operating junction temperature range | | Tı | -55 to + 150 | °C |
| Storage temperature range | | Тѕтс | -55 to + 150 | °C |

Note: 1.The testing condition of the thermal resistance (junction to ambient and junction to lead) is based on 0.375"(9.5mm) lead length between two 10x10cm copper pad heatsinks.

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITIONS | | MIN. | TYP. | MAX. | UNIT |
|-------------------------------|--------|--------------------------|---------------------|-------------|---------------------|---------------|----------|
| Breakdown voltage | VBR | I R=0.5mA | | 45 | - | - | ٧ |
| Instantaneous forward voltage | VF | F=1A F=5A F=8A | TJ=25°C | - - - | 0.3 0.39 0.43 | - - 0.5 | V |
| | | I F=1A I F=5A | TJ=125°C | - | 0.2 0.33 | - | V |
| Reverse current | l R | VR=36V | | - | 45 | - | μА |
| | | VR=45V | TJ=25°C TJ=125°C | - | - 12 | 250 - | μA mA |





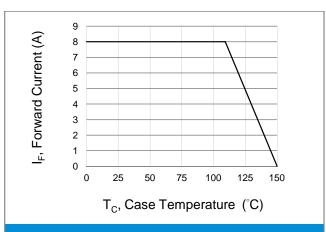


Fig.1 Forward Current Derating Curve

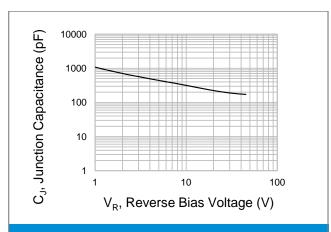


Fig.2 Typical Junction Capacitance

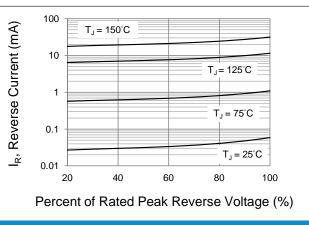


Fig.3 Typical Reverse Characteristics

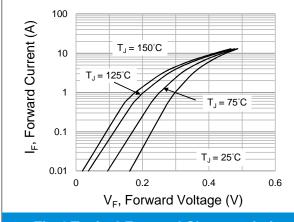


Fig.4 Typical Forward Characteristics

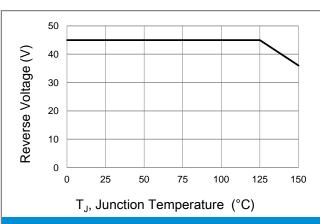


Fig.5 Operating Temperature Derating Curve





Part No_packing code_Version

SBM845LSS_AY_00001

SBM845LSS_AY_10001

SBM845LSS_B0_00001

SBM845LSS_B0_10001

SBM845LSS_R2_00001

SBM845LSS_R2_10001

For example : RB500V-40_R2_00001 Part No. Serial number Version code means HF Packing size code means 13"

| Packing Code XX | | | | Version Code XXXXX | | | |
|--------------------------------------|----------------------|-----------------------------------|----------------------|--------------------|----------------------|---------------------------------------|--|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code | |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number | |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number | |
| Bulk Packing (B/P) | В | 13" | 2 | | | | |
| Tube Packing (T/P) | Т | 26mm | Х | | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | | |

Packing type means T/R





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