



° o " k ' ' †

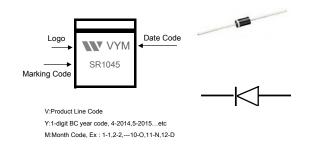
| PRIMARY CHARACTERISTICS | | |
|-------------------------|-------|--|
| V_{RRM} | 45V | |
| I _(AV) | 10A | |
| VF | 0.45V | |
| T _{J,Max} | 150°C | |

FEATURES

- Low switching noise
- Low forward voltage drop
- High current capability
- Low thermal resistance
- High surge capability
- High reliability

DO-201AD PACKAGE

• Body Marking : SR1045



MECHANICAL DATA

Case: Molded plastic, DO-201AD

Polarity : Shown above

 Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026

 Epoxy: UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics

Ratings at 25° C ambient temperature unless otherwise specified. Single phase, half wave, $60H_Z$, resistive or inductive load.

For capacitive load, derate current by 20%.

| | Symbols | SR1045 | Units |
|---|-------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 45 | Volts |
| Maximum RMS Voltage | V _{RMS} | 31.5 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 45 | Volts |
| Maximum Average Forward Rectified Current | | 10 | Amp |
| .375"(9.5mm) Lead Length | I _(AV) | 10 | |
| Peak Forward Surge Current, | | | |
| 8.3ms single half-sine-wave | I_{FSM} | 150 | Amp |
| superimposed on rated load (JEDEC method) | | | |
| Maximum Forward Voltage at 10A DC and 25℃ | $V_{\rm F}$ | 0.45 | Volts |
| Maximum Reverse Current at T _A =25℃ | т | 0.3 | 4 |
| at Rated DC Blocking Voltage T _A =100℃ | I_R | 20 | mAmp |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 38 | °C/W |
| Operating Junction Temperature Range | T_{J} | -55 to +150 | С |
| Storage Temperature Range | Tstg | -55 to +150 | C |

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375" (9.5mm) lead length P.C.B. Mounted







RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

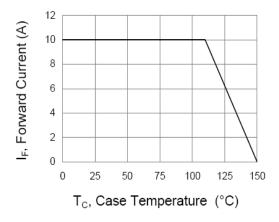


Fig.2 Typical Junction Capacitance

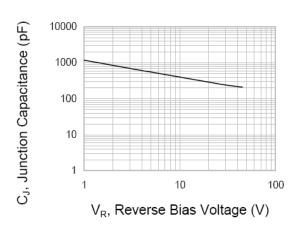


Fig.3 Typical Reverse Characteristics

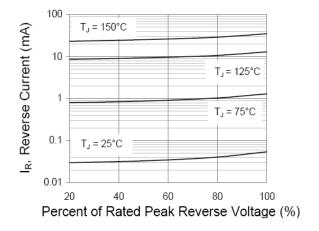
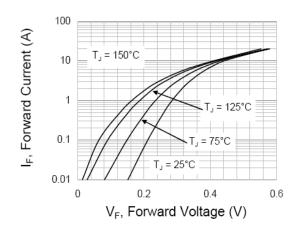


Fig.4 Typical Forward Characteristics



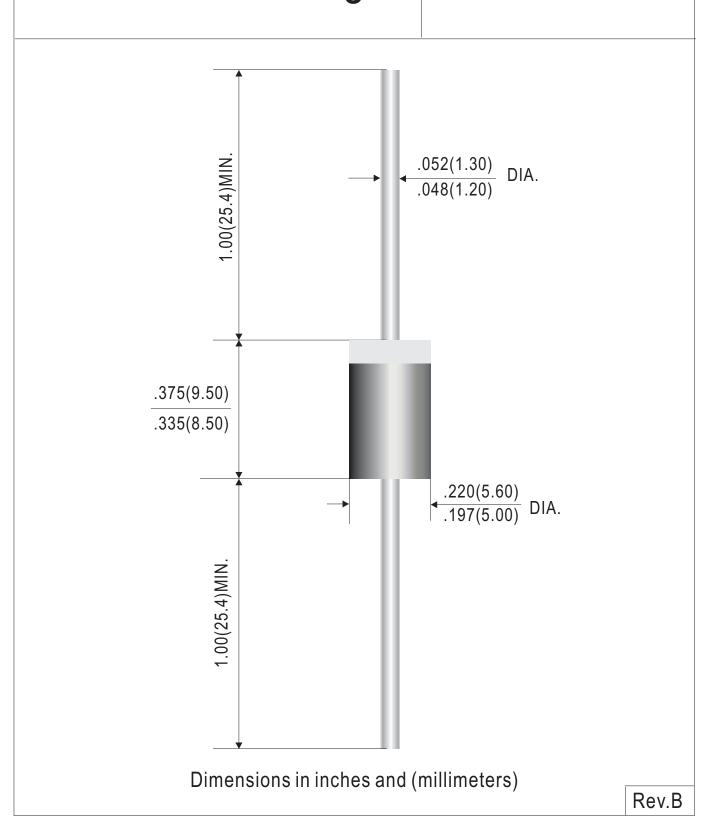




° o " k ' ' †

Outline Drawing

DO-201AD



2019.03 www.willas.com.tw Rev."





°o " k · · †

Ordering Information:

| Device PN | Packing |
|--|---|
| SR1045 -F ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾ | Ammo Pack:1200pcs/box; 12,000pcs/Carton |

Note: 1. Packing code, F(T): Tape & Ammo Packing, () is old packing code.

2. RoHS product for packing code suffix "G", Halogen free product for packing code suffix "H"

3.WS: Willas brand abbreviation, Label Type does not display

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

This is the preliminary specification. WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.