

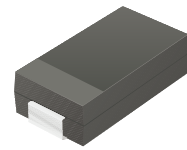
S1T-HF Thru. S1Y-HF

Reverse Voltage: 1300 to 2000 V

Forward Current: 1.0 A

RoHS Device

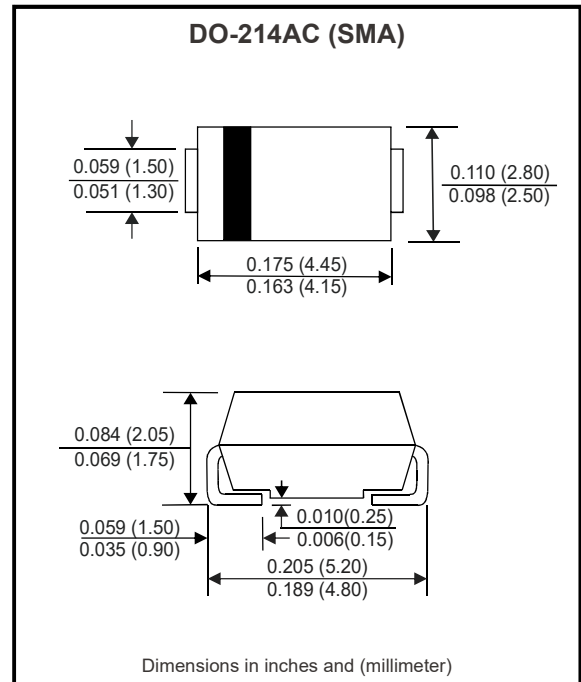
Halogen Free



Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Available in Lead Free Version

Circuit diagram



Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | S1T-HF | S1W-HF | S1Y-HF | Units |
|---|-----------------|--------------------|--------|--------|---------------|
| Repetitive peak reverse voltage | V_{RRM} | 1300 | 1600 | 2000 | V |
| DC blocking voltage | V_R | 1300 | 1600 | 2000 | V |
| RMS voltage | V_{RMS} | 910 | 1120 | 1400 | V |
| Peak forwardsurge current: 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 30.0 | | | A |
| Average forward current | $I_{F(AV)}$ | 1.0 | | | A |
| Forward voltage at 1.0A | V_F | 1.1 | | | V |
| DC reverse current | I_R | $T_J=25^{\circ}C$ | 5 | | μA |
| DC blocking voltage | | $T_J=125^{\circ}C$ | 100 | | |
| Typical thermal resistance | $R_{\theta JC}$ | 30 | | | $^{\circ}C/W$ |
| Operating temperature range | T_J | -65 to +150 | | | $^{\circ}C$ |
| Storage temperature range | T_{STG} | -65 to +150 | | | $^{\circ}C$ |

Notes: 1. P.C.B mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Fig.1 - Forward Current Derating Curve

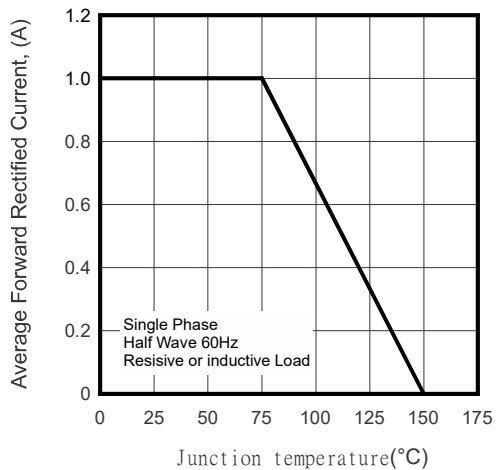
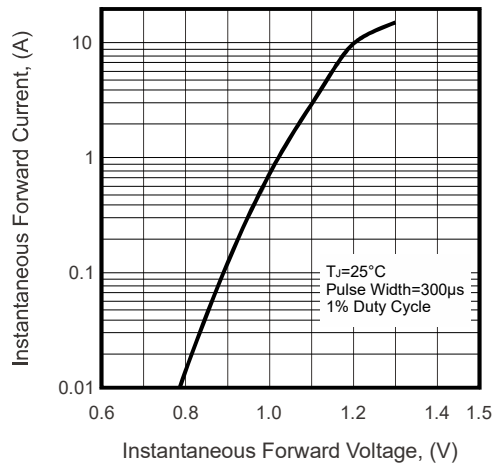
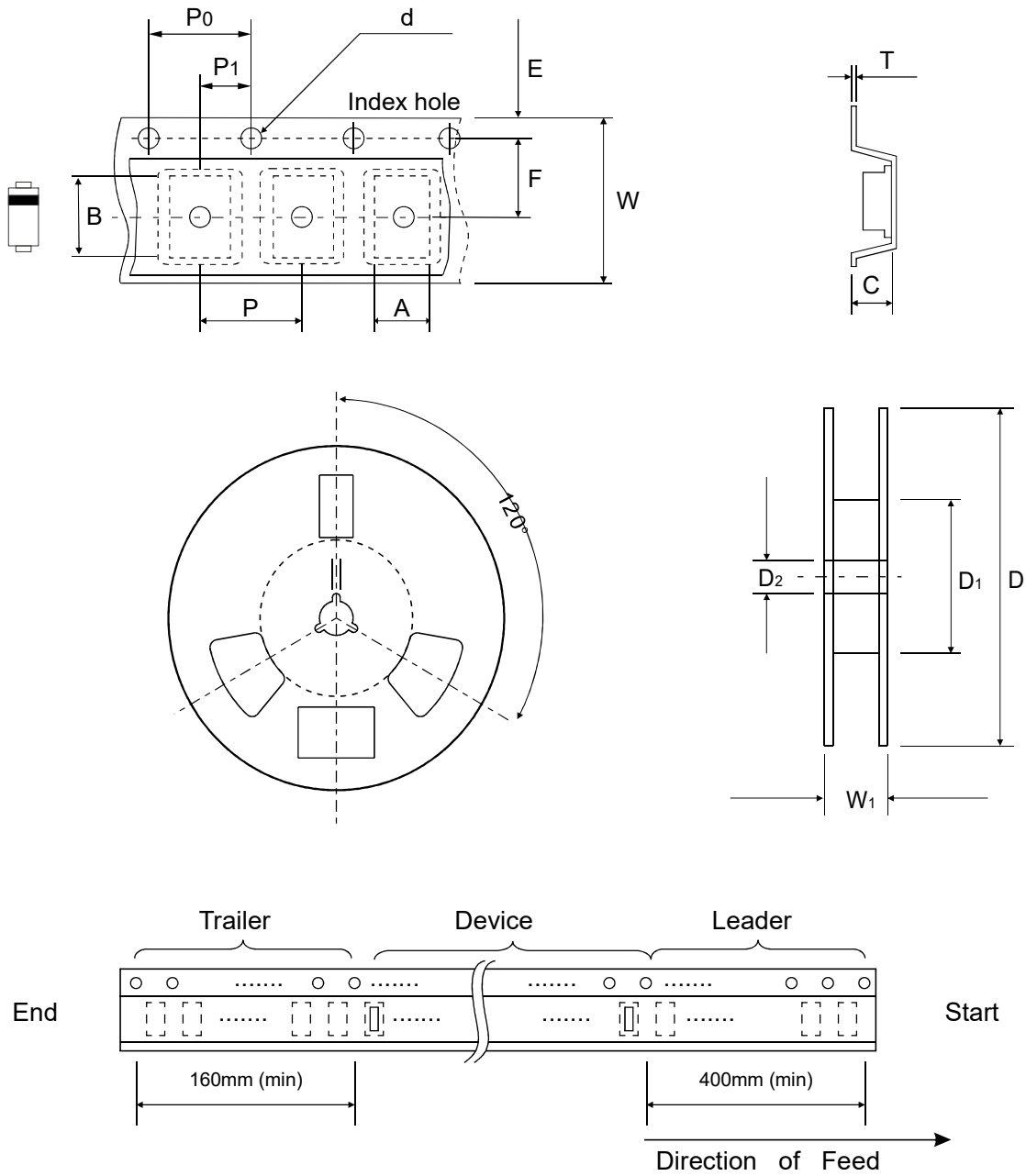


Fig.2 - Typical Instantaneous Forward Characteristics



Reel Taping Specification



| DO-214AC (SMA) | SYMBOL | A | B | C | d | D | D1 | D2 |
|-------------------|--------|---------------|---------------|---------------|---------------|----------------|----|---------------|
| | (mm) | 2.80 ± 0.10 | 5.33 ± 0.10 | 2.36 ± 0.10 | 1.55 ± 0.10 | 330 ± 2.00 | | 13.50 ± 2.00 |
| | (inch) | 0.110 ± 0.004 | 0.210 ± 0.004 | 0.093 ± 0.004 | 0.061 ± 0.004 | 12.992 ± 0.079 | | 0.531 ± 0.079 |

| DO-214AC (SMA) | SYMBOL | E | F | P | P0 | P1 | W | W1 | T |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|----|---------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.10 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 12.00 ± 0.10 | | 0.25 ± 0.10 |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.472 ± 0.004 | | 0.010 ± 0.004 |

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REV:A