

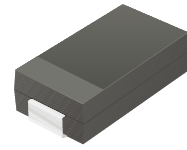
S3T-HF Thru. S3Y-HF

Reverse Voltage: 1300 to 2000 V

Forward Current: 3 A

RoHS Device

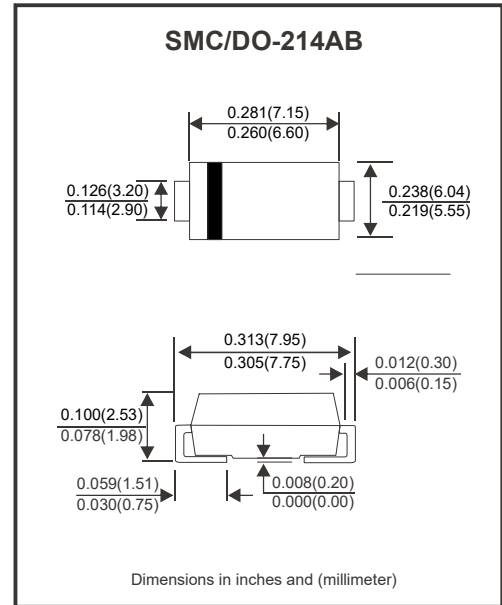
Halogen Free



Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 100A Peak
- Ideally Suited for Automated Assembly
- Available in Lead Free Version

Circuit diagram



Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | S3T-HF | S3W-HF | S3Y-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} | 100.0 | | | A |
| Average forward current | $I_{F(AV)}$ | 3.0 | | | A |
| Forward voltage at 3.0A | V_F | 1.1 | | | V |
| DC reverse current | I_R | | | | μA |
| DC blocking voltage | | | | | |
| Typical thermal resistance | $R_{\theta JC}$ | 10 | | | $^{\circ}C/W$ |
| 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.

Fig.1 - Forward Current Derating Curve

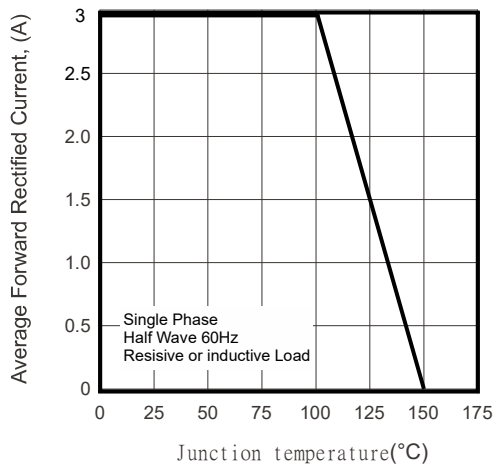
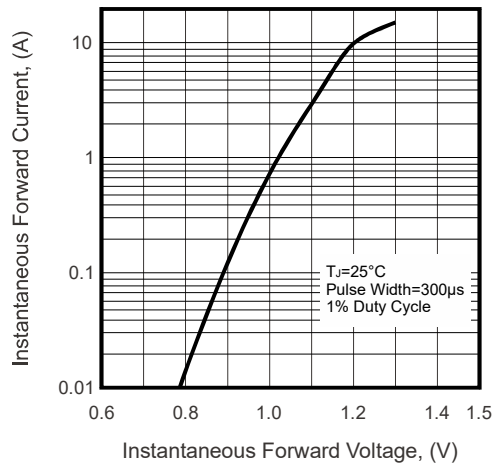
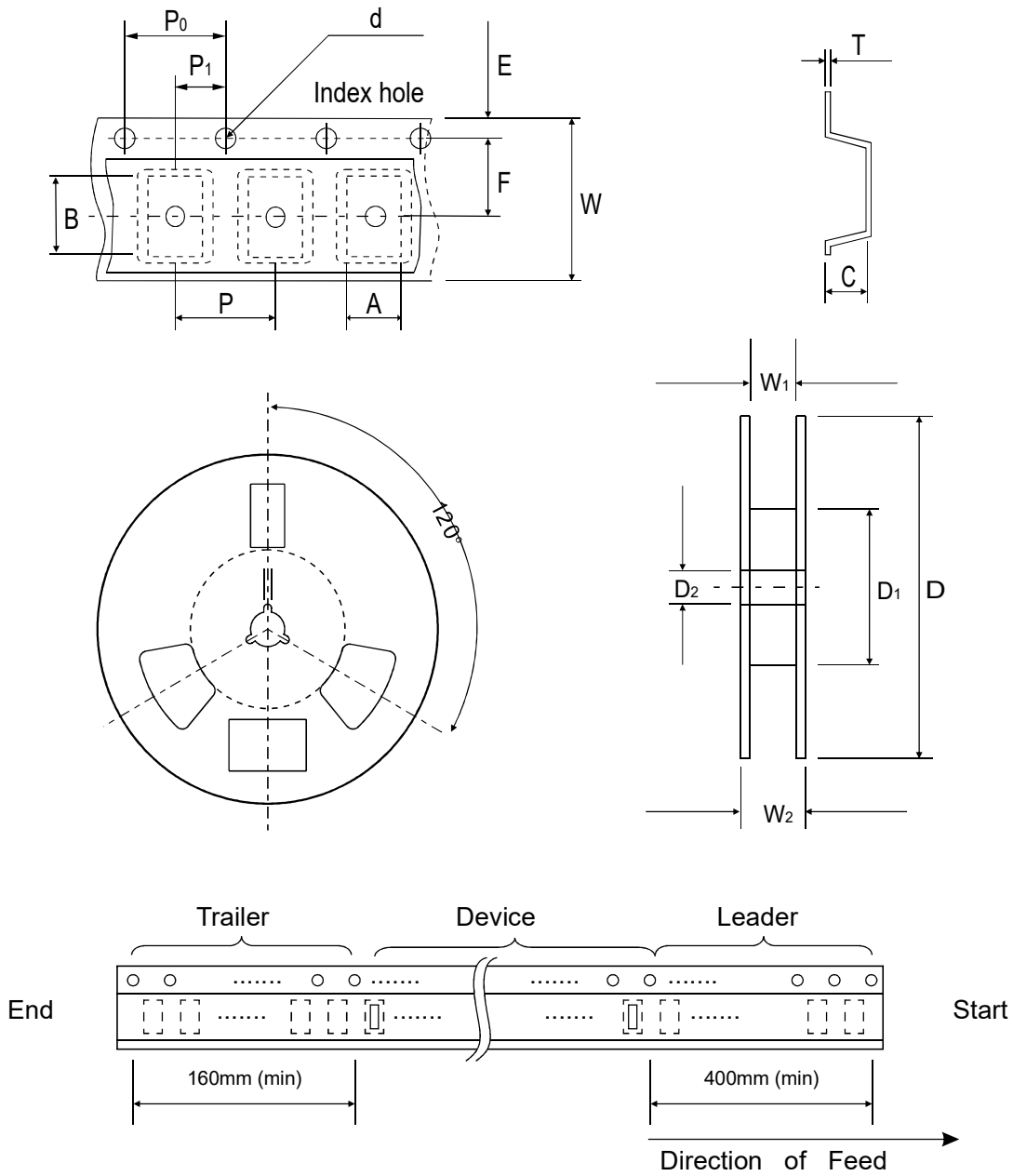


Fig.2 - Typical Instantaneous Forward Characteristics



Reel Taping Specification



| DO-214AB (SMC) | SYMBOL | A | B | C | d | T | D | D ₁ | D ₂ |
|-------------------|--------|------------|---|---|---------------|--------------|--------|----------------|---|
| | (mm) | See Note 1 | | | 1.55 ± 0.05 | 0.40 (Max.) | 330.00 | 50.00 (Min.) | 13.00 ^{+0.50} _{-0.20} |
| | (inch) | See Note 1 | | | 0.061 ± 0.002 | 0.016 (Max.) | 13.000 | 1.969 (Min.) | 0.512 ^{+0.020} _{-0.008} |

| DO-214AB (SMC) | SYMBOL | E | F | P | P ₀ | P ₁ | W | W ₁ | W ₂ |
|-------------------|--------|---------------|---------------|---------------|----------------|----------------|---------------|---|----------------|
| | (mm) | 1.75 ± 0.10 | 7.50 ± 0.05 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 16.00 ± 0.10 | 16.40 ^{+2.00} _{-0.00} | 22.40 (Max.) |
| | (inch) | 0.069 ± 0.004 | 0.295 ± 0.002 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.630 ± 0.004 | 0.646 ^{+0.079} _{-0.000} | 0.882 (Max.) |

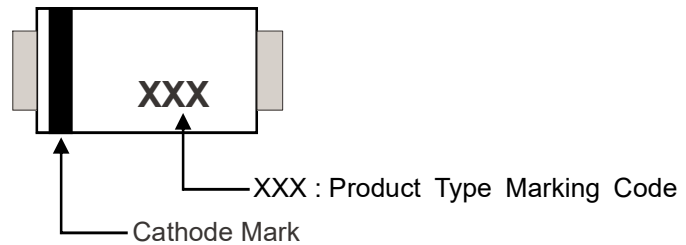
Notes: 1. A, B, and C the clearance between the component and the cavity must be within 0.5 mm max. for 8 mm tape and 12 mm tape, 1.0 mm max. for 16mm tape and 24 mm tape.

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

REV:A

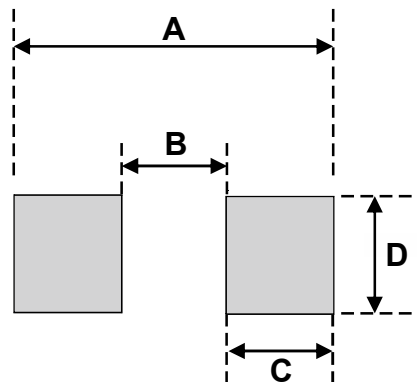
Marking Code

| Part Number | Marking code |
|-------------|--------------|
| S3T-HF | S3T |
| S3W-HF | S3W |
| S3Y-HF | S3Y |



Suggested PAD Layout

| SIZE | DO-214AB(SMC) | |
|------|---------------|-----------|
| | (mm) | (inch) |
| A | 8.13 | 0.320 |
| B | 4.69 MAX | 0.185 MAX |
| C | 1.52 MIN | 0.06 MIN |
| D | 3.20 MIN | 0.126 MIN |



Standard Packaging

| Case Type | REEL PACK | |
|-------------------|-----------------|---------------------|
| | REEL (pcs) | Reel Size (inch) |
| DO-214AB (SMC) | 3,000 | 13 |