

S3T-HF Thru. S3Y-HF

Reverse Voltage: 1300 to 2000 V

Forward Current: 3 A

RoHS Device

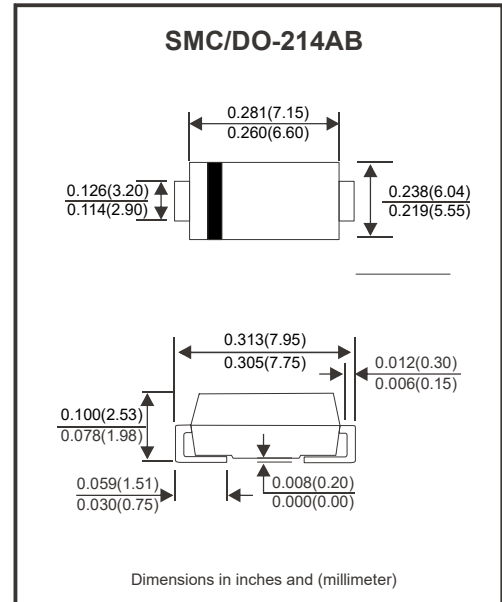
Halogen Free



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	T _J =25°C	I _R	10			μA
DC blocking voltage	T _J =125°C		250			
Typical thermal resistance		R _{θJC}	10			°C/W
Operating temperature range		T _J	-65 to +150			°C
Storage temperature range		T _{STG}	-65 to +150			°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

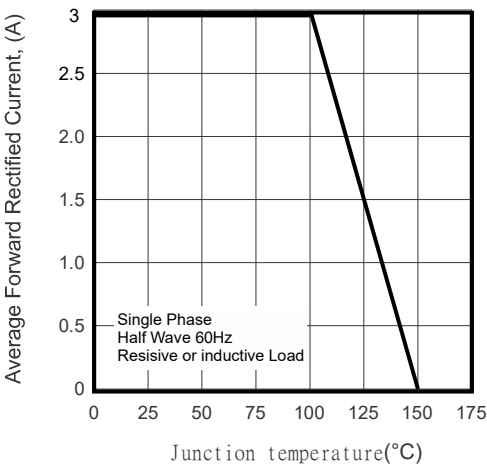
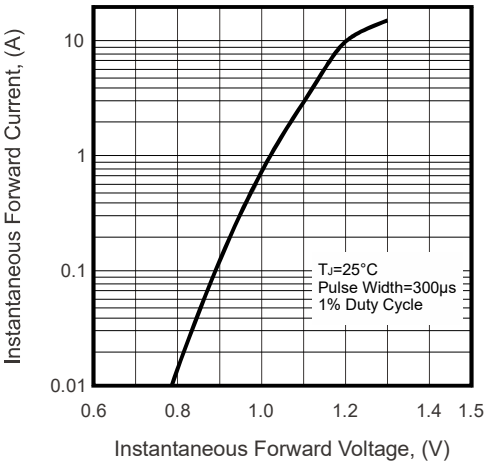
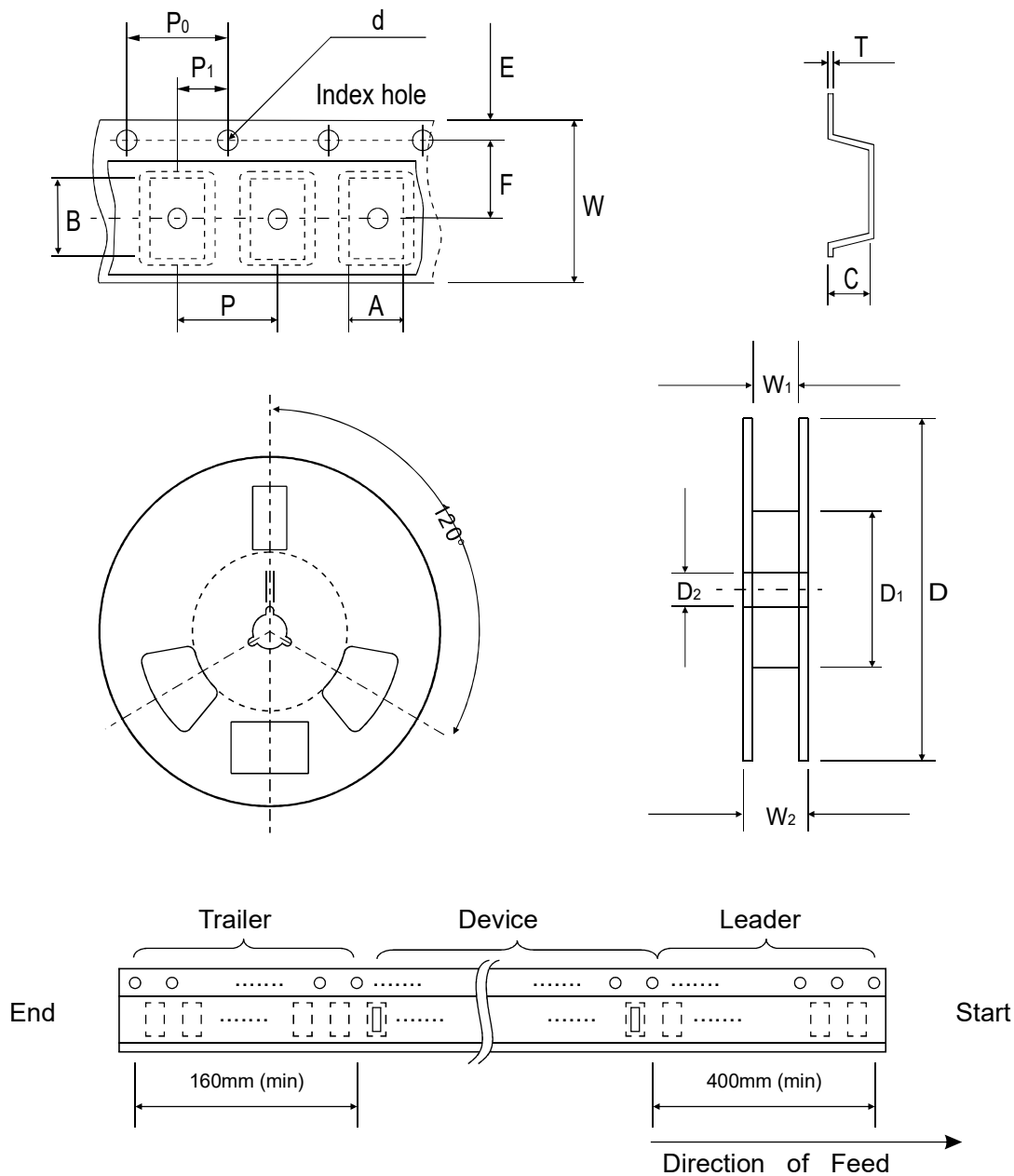


Fig.2 - Typical Instantaneous Forward Characteristics



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)				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.)

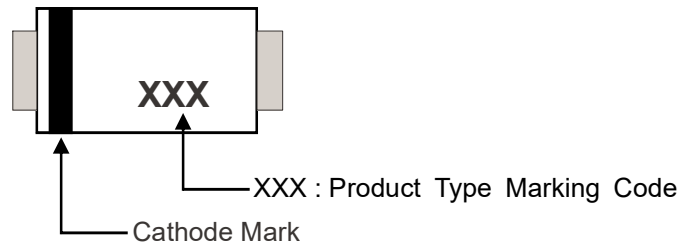
Notes: 1. A, B, and C the clearance between the component and the cavity must be within 0.5 mm max. for 8 mm tape and 12 mm tape, 1.0 mm max. for 16mm tape and 24 mm tape.

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

REV:A

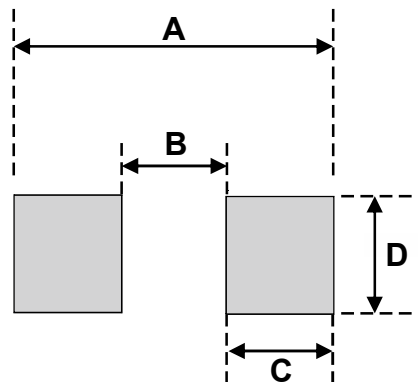
Marking Code

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