

S1T-HF Thru. S1Y-HF

Reverse Voltage: 1300 to 2000 V

Forward Current: 1.0 A

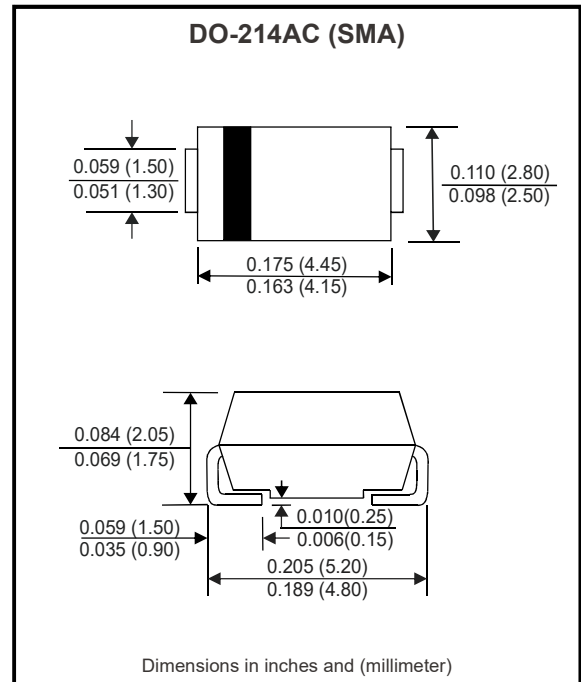
RoHS Device
Halogen Free



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

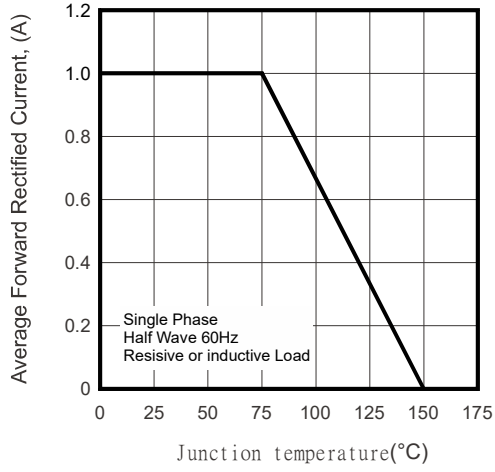
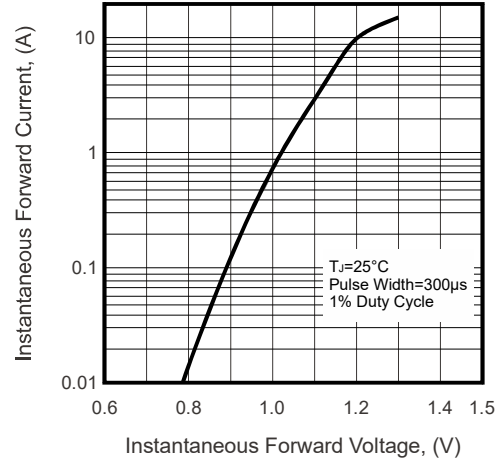
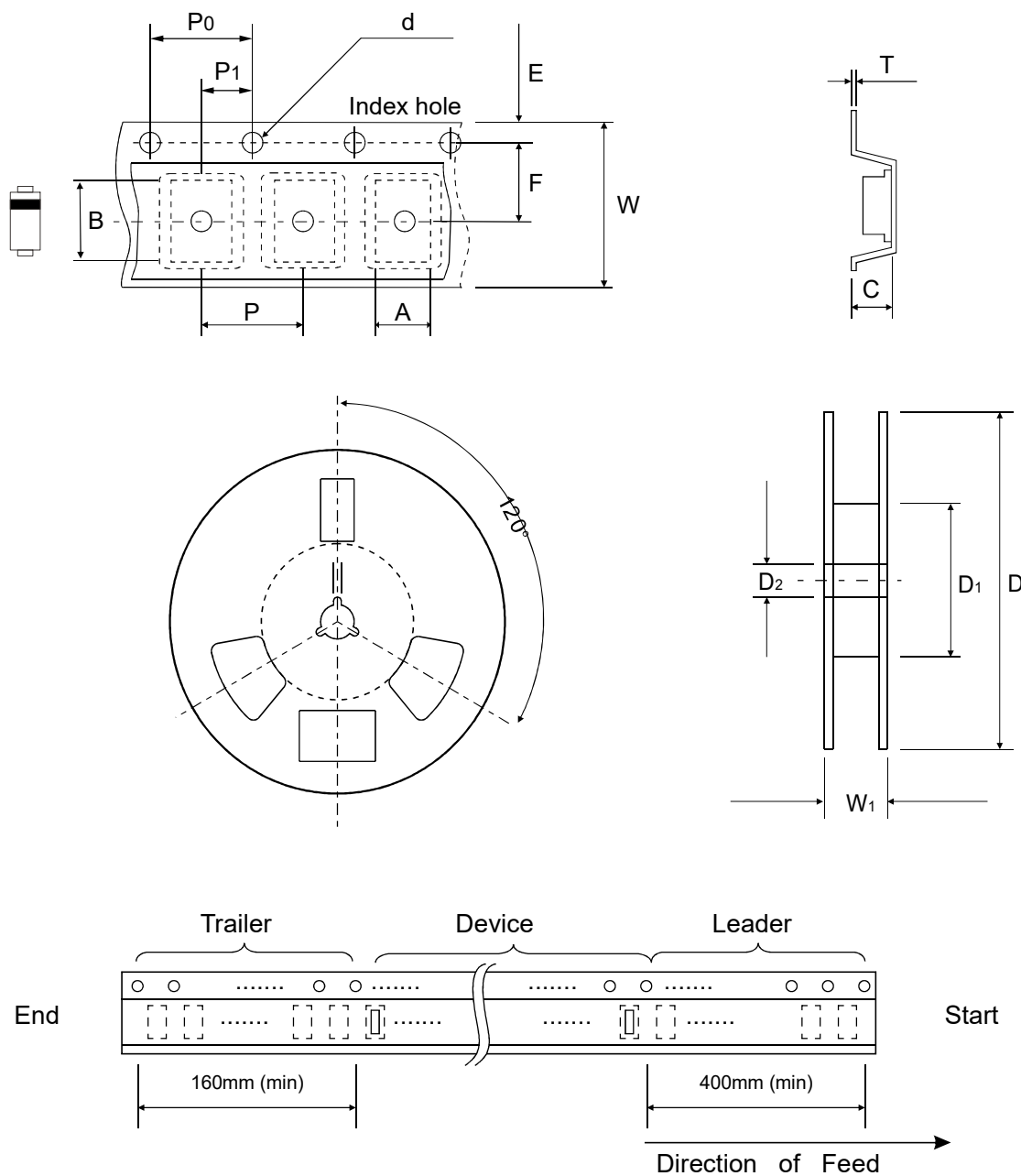


Fig.2 - Typical Instantaneous Forward Characteristics



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

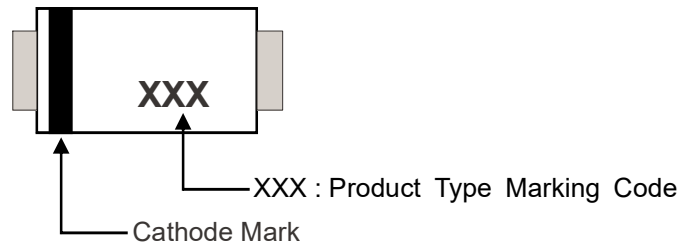
DO-214AC (SMA)	SYMBOL	E	F	P	P0	P1	W	W1	T
	(mm)	1.75 ± 0.10	5.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 ± 0.10		0.25 ± 0.10
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 ± 0.004		0.010 ± 0.004

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

REV:A

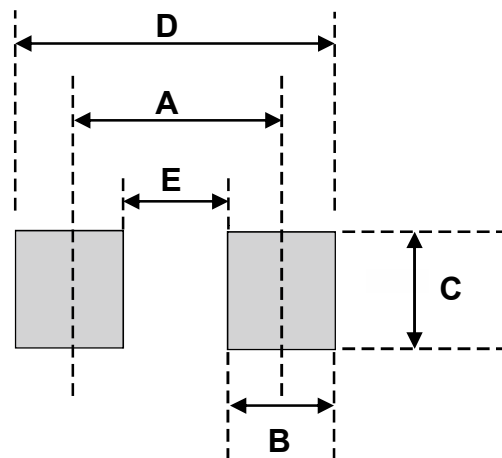
Marking Code

Part Number	Marking code
S1T-HF	S1T
S1W-HF	S1W
S1Y-HF	S1Y



Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.00	0.157
B	2.50	0.100
C	1.80	0.071
D	6.50	0.256
E	1.50	0.060



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AC (SMA)	5,000	13