

S1T-HF Thru. S1Y-HF

Reverse Voltage: 1300 to 2000 V

Forward Current: 1.0 A

RoHS Device

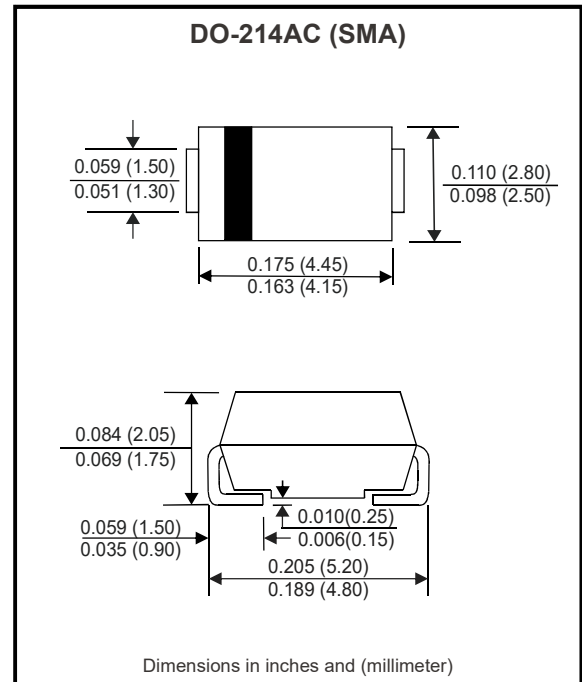
Halogen Free



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	T _J =25°C	I _R	5			μA
DC blocking voltage	T _J =125°C		100			
Typical thermal resistance		R _{θJC}	30			°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

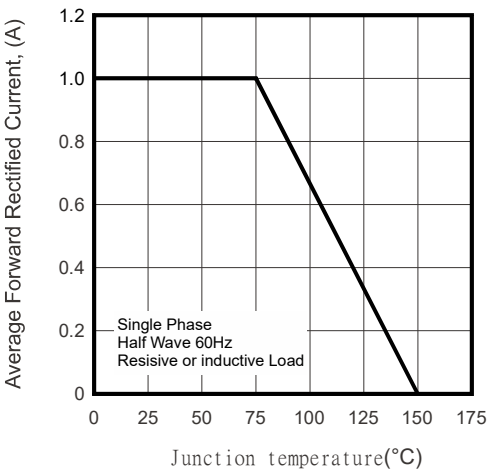


Fig.2 - Typical Instantaneous Forward Characteristics

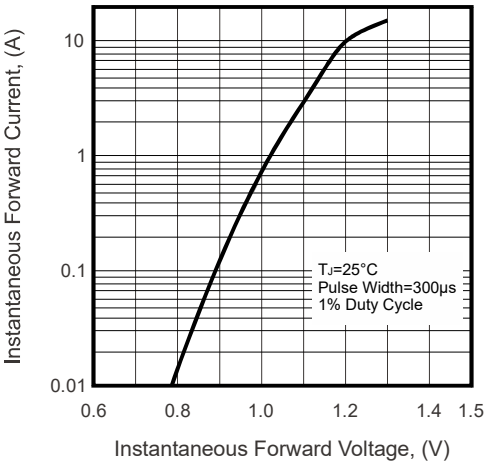


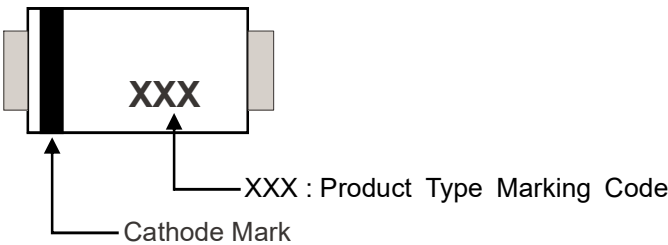
Figure 1: Dimensions of the device. The figure includes four sub-diagrams: (a) Top view of the device showing dimensions P_0 , P_1 , d , E , F , W , B , P , A , and an index hole. (b) Side view showing dimensions T and C . (c) Top view of the circular base showing a 120° angle and a central feature. (d) Side view of the circular base showing dimensions D_1 , D_2 , and W_1 .

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	P ₀	P ₁	W	W ₁	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

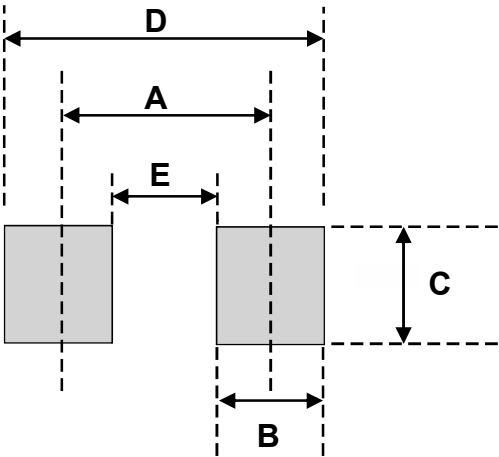
Marking Code

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