



DESCRIPTION

- ♦ High junction temperature 175°C
- High current capability, low forward voltage
- \diamond Excellent high temperature stability
- \diamond Low power loss, and high efficiency
- \diamond High forward surge capability
- ♦ RoHS compliant, and Halogen free

ORDERING INFORMATION

- ♦ Device: SS510HF
- ♦Package: SMAF
- ♦Marking: SS510H
- ♦ Material: Halogen free
- ♦ Packing: Tape & 7" or 13" Reel
- ♦Quantity per reel: 3,000pcs or 10,000pcs

PIN CONFIGURATION



FEATURES

- ♦ Case: SMAF small outline plastic package
- ♦ Molding Compound Flammability Rating: UL94-0
- ♦ High temperature soldering guaranteed: 260°C /10second

APPLICATIONS

- ♦ Switching mode power supply applications
- $\diamond \mbox{Portable}$ equipment battery applications
- ♦ High frequency rectification
- ♦DC/DC converter
- ♦Polarity protection applications

PACKAGE OUTLINE



ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units	
V _{RRM}	Repetitive Peak Reverse Voltage	100	V	
I _{F(AV)}	Average Forward Current	5	А	
I _{FSM}	Peak Forward Surge Current, 8.3ms single half sine-wave	125	А	
TJ & TSTG	T _{STG} Junction and Storage Temperature		۵°C	

ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Тур	Max	Units
VF	Forward Voltage	I _F = 3A		0.78	0.83	V
V _R	Reverse Breakdown Voltage	I _R = 0.1mA	100			V
I _R	Reverse Leakage Current	V _R = 100V		0.5	5	μA

Fig 2 Max. Non-repetitive Forward Surge Current Fig 1 Typical Forward Current Derating Curve 140 120 120 100 90 80 70 60 50 40 30 20 10 0 6.0 Peak Forward Surge Current(A) 0.0 Lead temperature (°C) Numnber of Cycles at 60Hz Fig 3 Typical Instantaneous Forward Characteristics Fig 4 Typical Reverse Characteristics Instantaneous Reverse Current (uA) Instantaneous Forward Current (A)

0.1

Percent of Rated Peak Reverse Voltage (%)

RATING AND CHARACTERISTICS CURVES (SS510HF)

OUTLINE DIMENSIONS





 Instantaneous Forward Voltage (mV)



Bottom View

UNIT		А	С	D	E	е	g	HE	2
mm	max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	



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