

**ES1AF~ES1JF**  
Rev.F May.-2019

Surface Mount Superfast Recovery Rectifier, Reverse Voltage:50 to600V, Forward Current:1.0A, SMAF thin package.

Features: Glass Passivated Chip Junction Fast reverse recovery time Lead free in comply with EU ROHS 2011/65/EU directives

/ Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating							Unit
		ES1AF	ES1BF	ES1CF	ES1DF	ES1EF	ES1GF	ES1JF	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at $T_L=100$	$I_{F AV}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Typical Junction Capacitance at $V_R=4V, f=1MHz$	$C_j$	10							pF
Typical Thermal Resistance <sup>1</sup>	$R_{JA}$	115							/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55~+150							

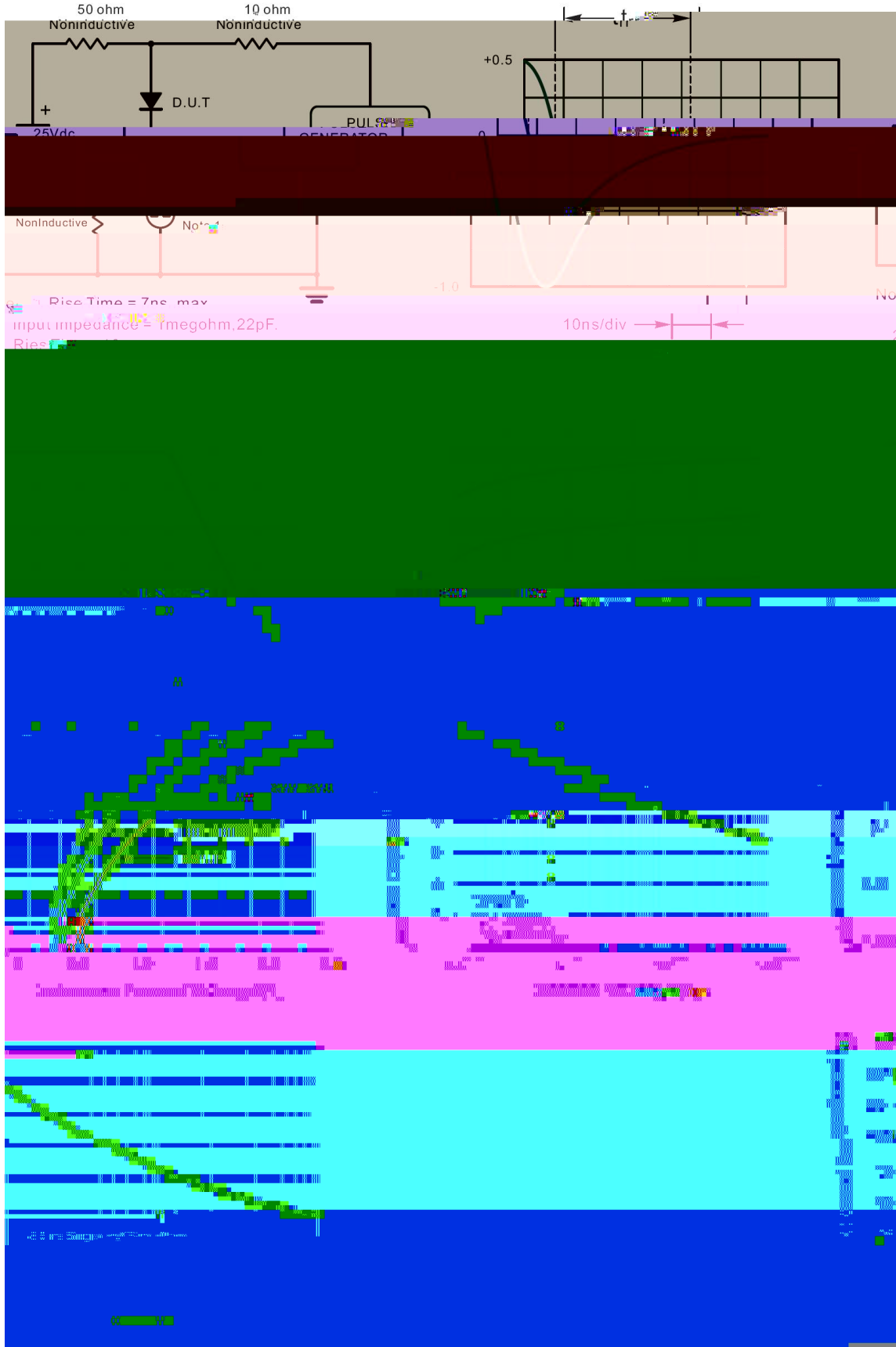
Note:

1 P.C.B. mounted with 0.2X0.2"(5X5 mm) copper pad areas.

/ Electrical Characteristics(Ta=25 )

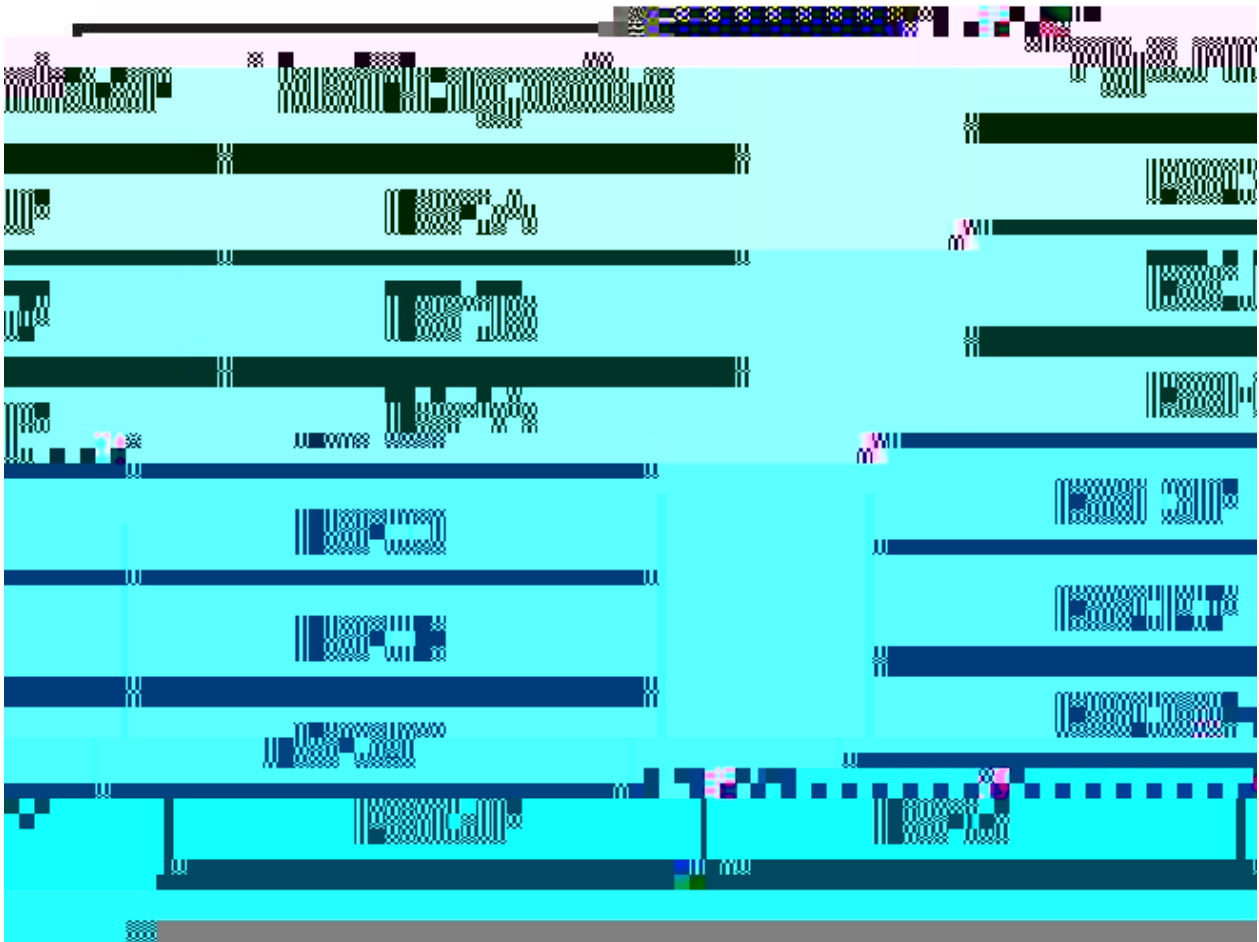
Parameter	Symbol	Test Conditions	Rating						Unit
			ES1AF	ES1BF	ES1CF	ES1DF	ES1EF	ES1GF	
Maximum Forward Voltage	$V_F$	$I_F=1.0A$	1.0			1.25		1.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25$	5.0						$\mu A$
		$T_a=125$	100						$\mu A$
Maximum Reverse Recovery Time	$t_{rr}$	$I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$	35						ns

/ Electrical Characteristic Curve

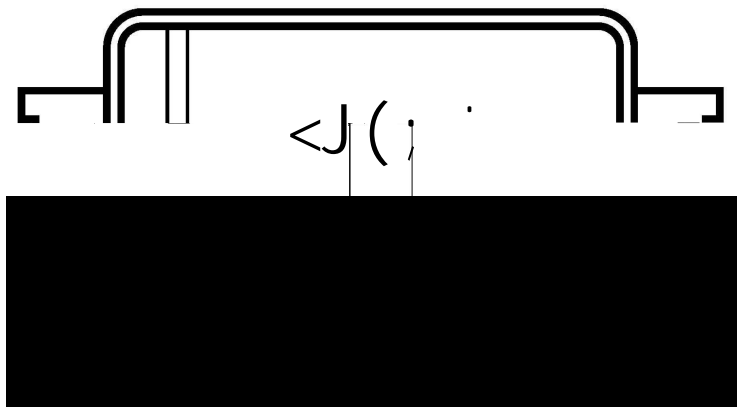


**ES1AF~ES1JF**  
Rev.F May.-2019

# Marking



/ Marking Instructions



<J(;

\*\*\*\*

(

\*

Note:

<J( ; Product Type Code

\*\*\*\* Lot No. Code The 1st means:YM Code The last 3 means:little Lot No  
Code

**ES1AF~ES1JF**  
Rev.F May.-2019

**DATA SHEET**