

## Surface Mount Rectifiers

## ES1AFA--ES1JFA

### FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Alcohol ,Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0



### MECHANICAL DATA

- Case: SMAFL molded plastic
- Terminals: Solder able per MIL- STD-202,Method 208
- Polarity: Color band denotes cathode
- Mounting position: Any

### Maximum Ratings(@TA = 25°C unless otherwise specified)

Characteristic	Symbol	ES1AFA	ES1BFA	ES1CFA	ES1DFA	ES1EFA	ES1GFA	ES1HFA	ES1JFA	UNITS
Marking code		E1A	E1B	E1C	E1D	E1E	E1G	E1H	E1J	
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	$V_{DC}$	50	100	150	200	300	400	500	600	V
Maximum average forward rectified current @T <sub>A</sub> =75°C	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T <sub>J</sub> =125°C	$I_{FSM}$	30								A

### Thermal Characteristics

Characteristic	Symbol	ES1AFA	ES1BFA	ES1CFA	ES1DFA	ES1EFA	ES1GFA	ES1HFA	ES1JFA	UNITS
Operating junction temperature range	$T_J$	- 55 ---- + 150								°C
Storage temperature range	$T_{STG}$	- 55 ---- + 150								°C

### Electrical Characteristics (@TA = 25°C unless otherwise specified)

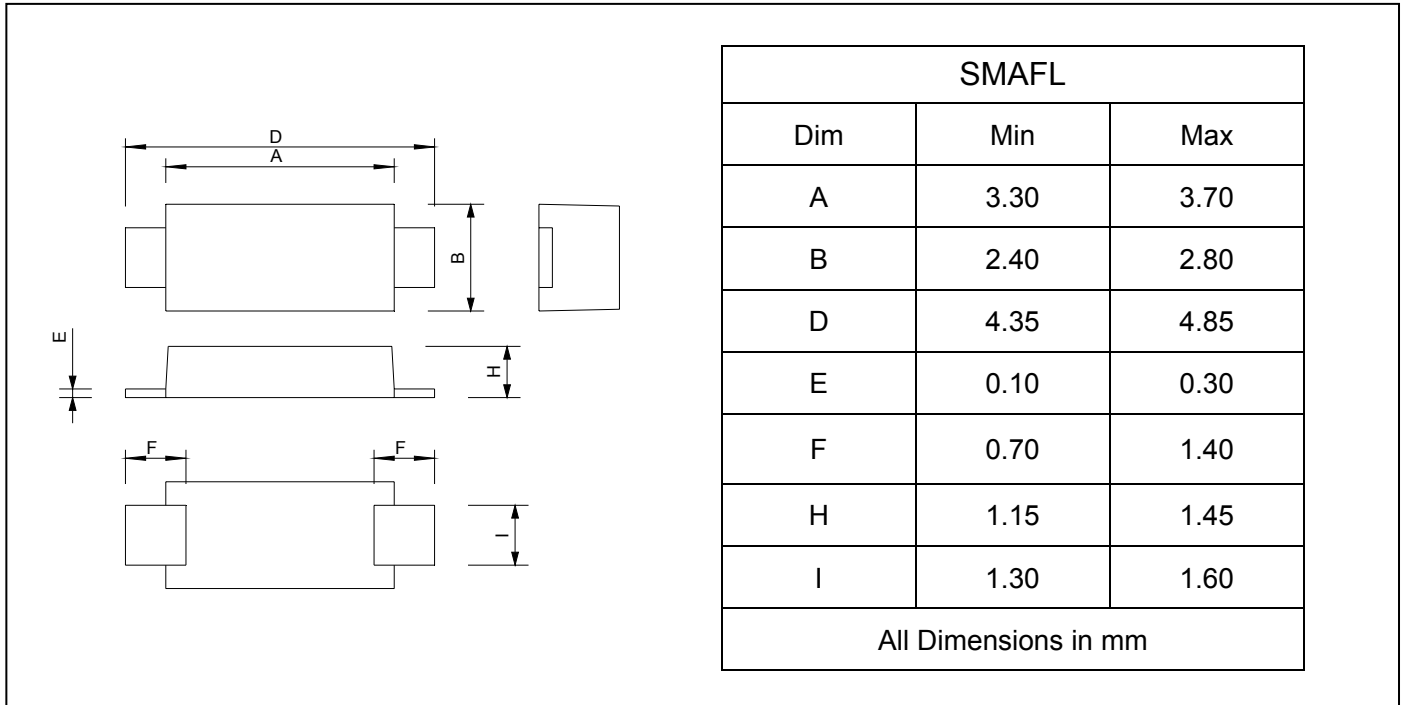
Characteristic	Symbol	ES1AFA	ES1BFA	ES1CFA	ES1DFA	ES1EFA	ES1GFA	ES1HFA	ES1JFA	UNITS
Maximum instantaneous forward voltage at 1.0 A	$V_F$	0.98				1.25		1.70		V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	$I_R$	5.0				200				μA
Maximum reverse recovery time (Note1)	$t_{rr}$	35								ns

NOTE: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$

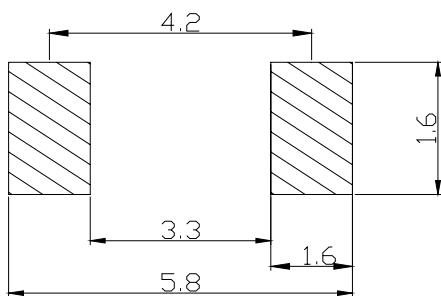
## Surface Mount Rectifiers

## ES1AFA--ES1JFA

### PACKAGE OUTLINE DIMENSIONS



### SOLDERING FOOTPRINT



Unit : mm

### PACKAGE INFORMATION

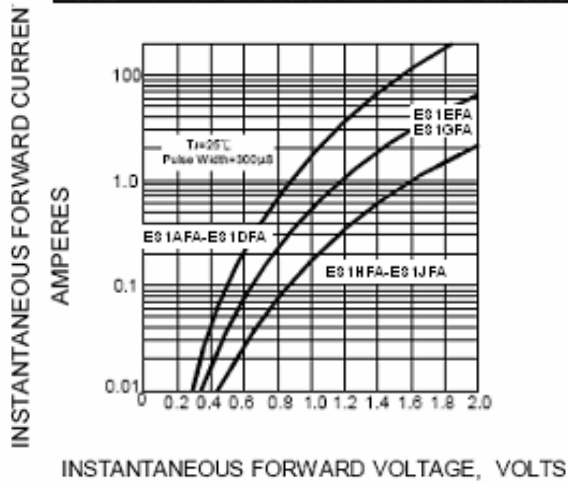
Device	Package	Shipping
ES1AFA--ES1JFA	SMAFL	10000/Tape&Reel



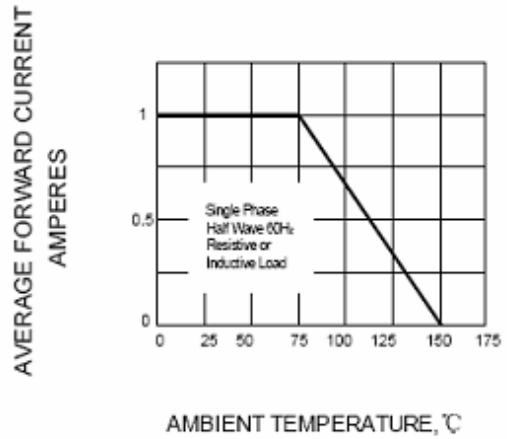
# Surface Mount Rectifiers

# ES1AFA--ES1JFA

**FIG.1 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.2 -- FORWARD DERATING CURVE**



**FIG.3 -- PEAK FORWARD SURGE CURRENT**

