



Micro Commercial Components



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# SS12FL THRU SS110FL

## 1 Amp Schottky Rectifier 20 to 100 Volts

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 35°C/W Junction To Lead  
55°C/W Junction To Case  
90°C/W Junction To Ambient

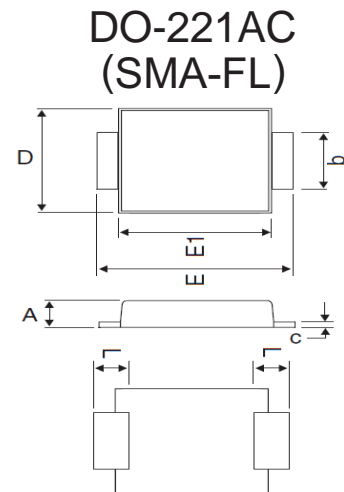
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS12FL	SS12	20V	14V	20V
SS13FL	SS13	30V	21V	30V
SS14FL	SS14	40V	28V	40V
SS15FL	SS15	50V	35V	50V
SS16FL	SS16	60V	42V	60V
SS18FL	SS18	80V	56V	80V
SS110FL	SS110	100V	70V	100V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_L = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SS12FL~14FL SS15FL~16FL SS18FL~110FL	$V_F$	.50V .70V .85V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance SS12FL~16FL SS18FL~110FL	$C_J$	110pF 30pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

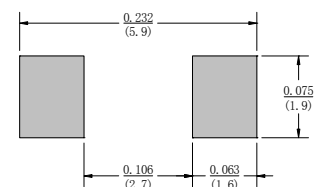
\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.



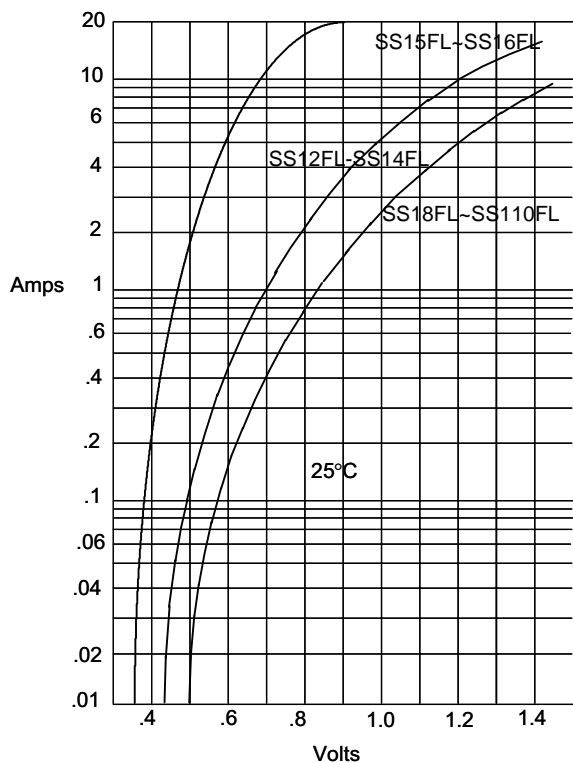
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	MIN .035	MAX .047	MIN 0.90	MAX 1.20	
b	.049	.065	1.25	1.65	
C	.004	.016	0.10	0.40	
D	.089	.116	2.25	2.95	
E	.173	.220	4.40	5.60	
E1	.126	.181	3.20	4.60	
L	.028	.059	0.70	1.50	

### SUGGESTED SOLDER PAD LAYOUT



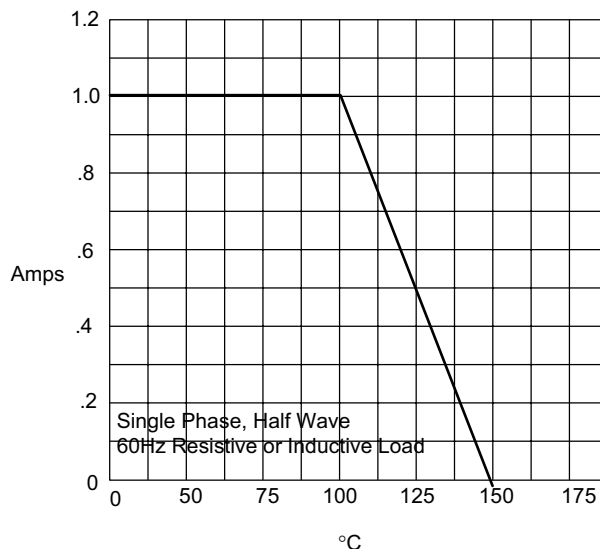
# SS12FL thru SS110FL

Figure 1  
Typical Forward Characteristics



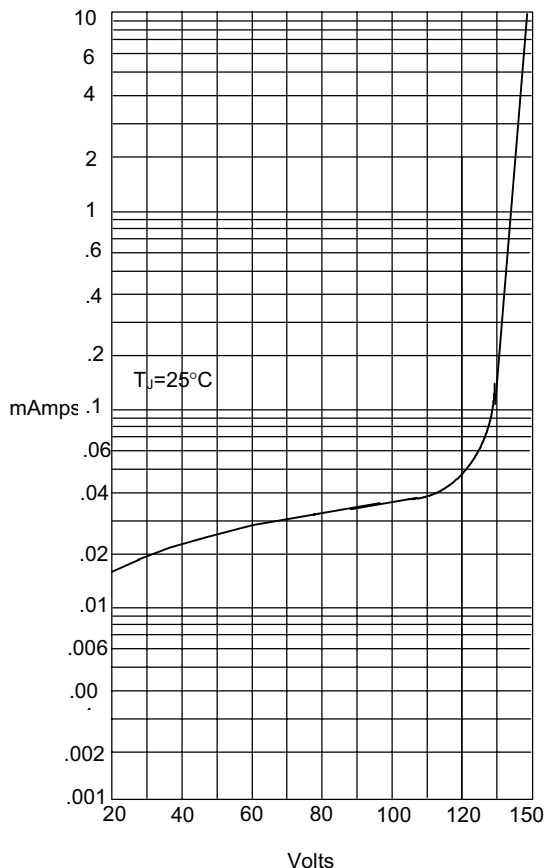
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



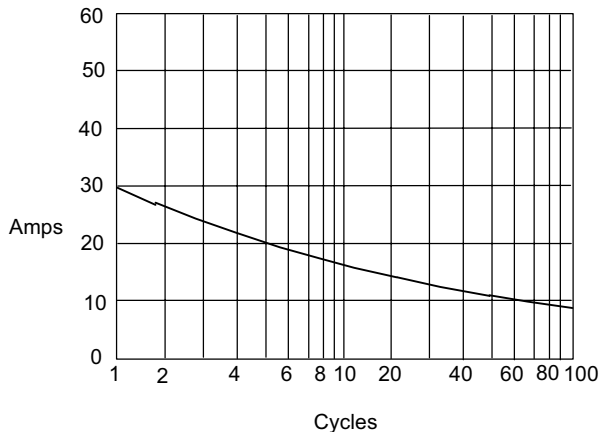
Average Forward Rectified Current - Amperes *versus*  
Lead Temperature - °C

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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