



Micro Commercial Components

# SS12E THRU SS110E

## 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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

### Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS12E	SS12	20V	14V	20V
SS13E	SS13	30V	21V	30V
SS14E	SS14	40V	28V	40V
SS15E	SS15	50V	35V	50V
SS16E	SS16	60V	42V	60V
SS18E	SS18	80V	56V	80V
SS110E	SS110	100V	70V	100V

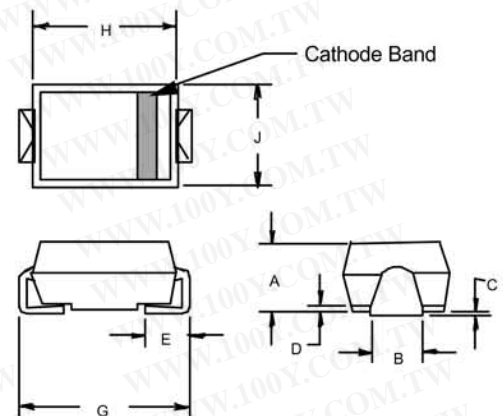
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_a = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$		$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
		SS12E-14E SS15E-16E SS18E-110E	.60V .70V .85V
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	$C_J$	110pF 30pF	Measured at 1.0MHz, $V_R=4.0V$
		SS12E - SS16E SS18E-SS110E	

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

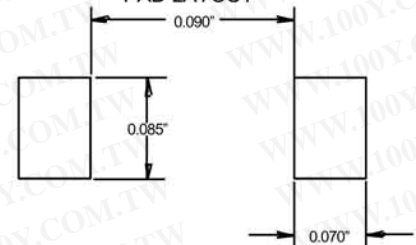
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

(SMAE)



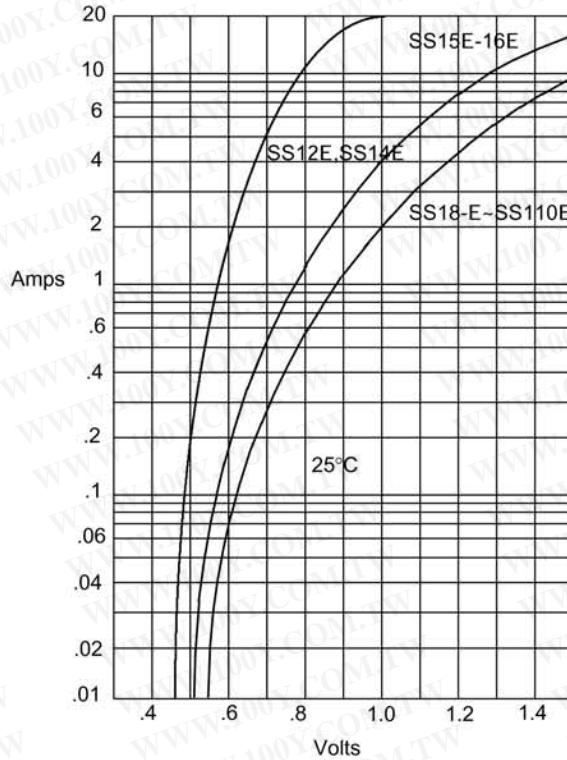
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.079	.096	2.01	2.44	
B	.050	.075	1.27	1.90	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
G	.189	.208	4.80	5.30	
H	.157	.180	4.00	4.57	
J	.090	.115	2.29	2.92	

SUGGESTED SOLDER PAD LAYOUT



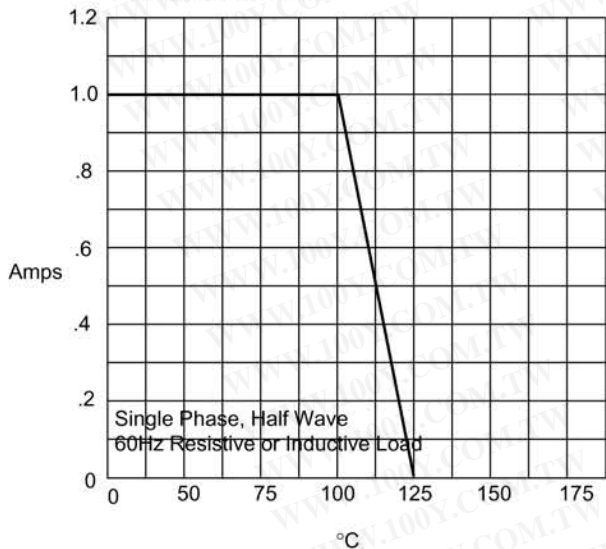
# SS12E thru SS110E

Figure 1  
 Typical Forward Characteristics



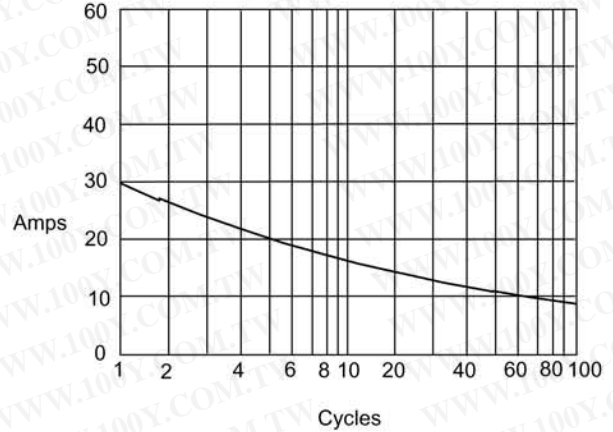
Instantaneous Forward Current - Amperes versus  
 Instantaneous Forward Voltage - Volts

Figure 2  
 Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
 Ambient Temperature - °C

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;6Kpcs/Reel

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