

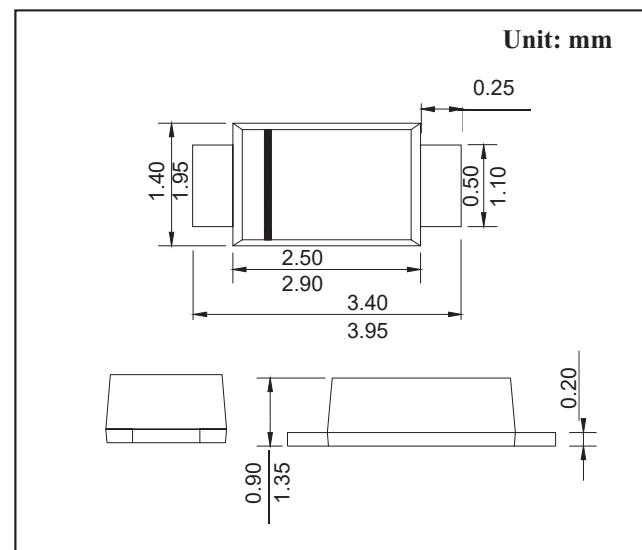
## SOD-123FL SCHOTTKY BARRIER DIODE

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: SOD-123FL molded plastic
- Mounting position: Any



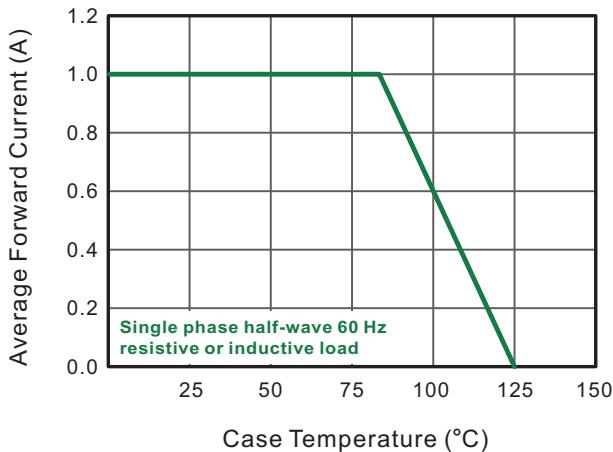
### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

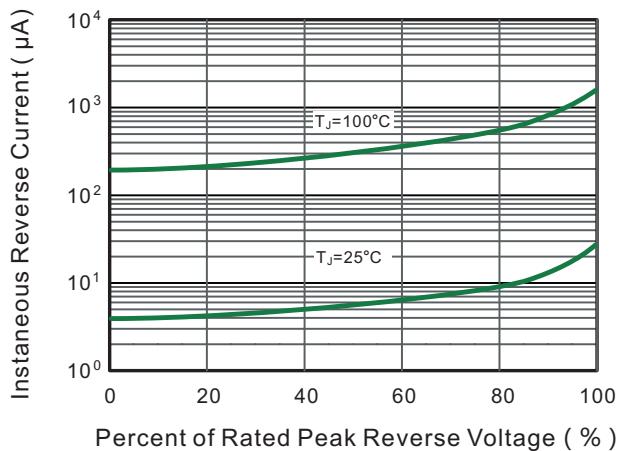
Parameter	Symbols	K12W	K14W	K16W	K18W	K110W	K112W	K115W	K120W	Units					
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V					
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V					
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V					
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0							A						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30							A						
Max Instantaneous Forward Voltage at 1A	$V_F$	0.55		0.70		0.85		0.90		V					
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	$I_R$	0.3 10			0.2 5			0.1 2		mA					
Typical Junction Capacitance	$C_J$	110		80											
Typical Thermal Resistance	$R_{\theta JA}$	100							$^\circ C/W$						
Operating Junction Temperature Range	$T_j$	-55 ~ +125							$^\circ C$						
Storage Temperature Range	$T_{stg}$	-55 ~ +150							$^\circ C$						

## RATINGS AND CHARACTERISTIC CURVES

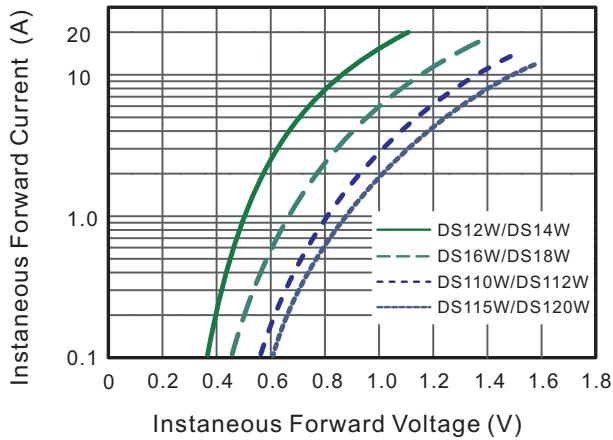
**Fig.1 Forward Current Derating Curve**



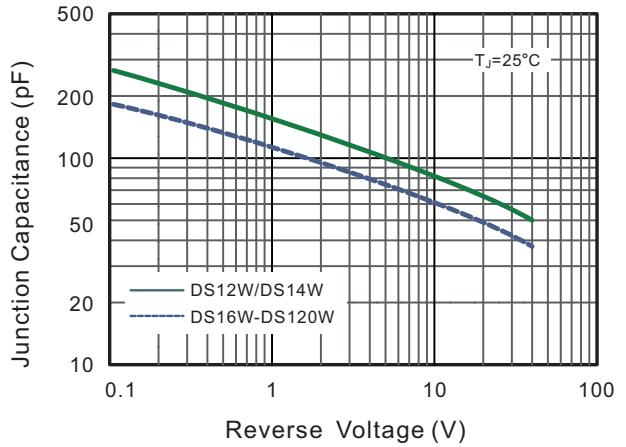
**Fig.2 Typical Reverse Characteristics**



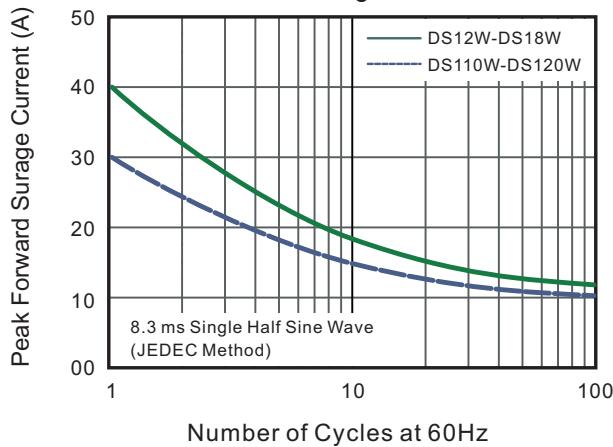
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6-Typical Transient Thermal Impedance**

