



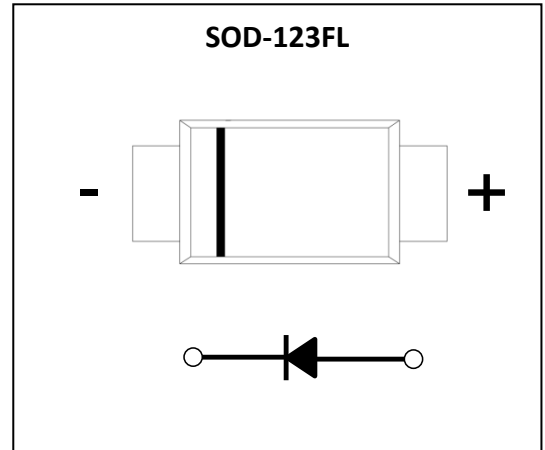
#### DSS22-DSS220 Schottky Rectifier

##### Feature

- For surface mounted application
- High current capability
- Low  $V_F$
- High surge current capability

##### MARKING:

- S2X  
X: From 2 To 20



#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	DSS									Unit
		22	23	24	25	26	28	210	215	220	
Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Average Forward Current (60Hz Half-sine wave, Resistance load, TL(Fig.1))	$I_{F(AV)}$	2									A
Non-repetitive Peak Forward Surge Current (60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$ )	$I_{FSM}$	50									A
Junction Temperature	$T_J$	-55 ~ +125			-55 ~ +150						$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150									$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	DSS								Unit
			22	23	24	25	26	28	210	215	
Peak Forward Voltage	$V_F$	$I_F=2\text{A}$	0.55		0.70		0.85		0.95		V
Peak Reverse Current	$I_{RRM1}$	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$		0.5		0.1				mA
	$I_{RRM2}$		$T_a=100^\circ\text{C}$		10		5				mA
Thermal Resistance (Typical)	$R_{\theta J-A}$	Between junction and ambient	85								$^\circ\text{C}/\text{W}$
	$R_{\theta J-L}$	Between junction and terminal	23								$^\circ\text{C}/\text{W}$
Junction Capacitance (Typical)	$C_j$	$F=1.0\text{MHz}, V_R=4.0\text{V}$	103		95		60		32		pF

**Typical Characteristics**

FIG.1: FORWARD CURRENT DERATING CURVE

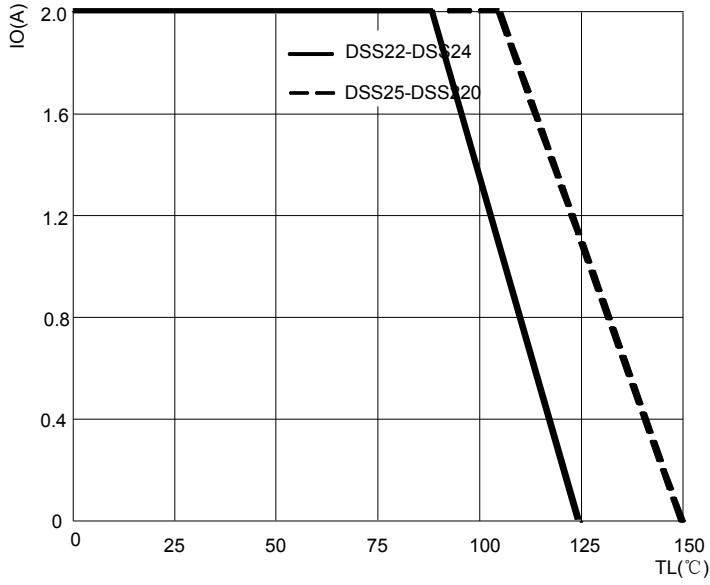


FIG2: Surge Forward Current Capability

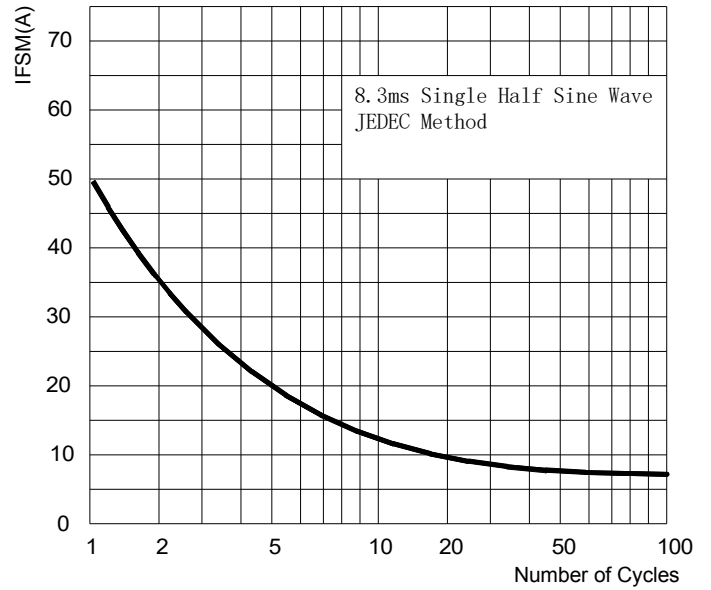


FIG.3: TYPICAL FORWARD CHARACTERISTICS

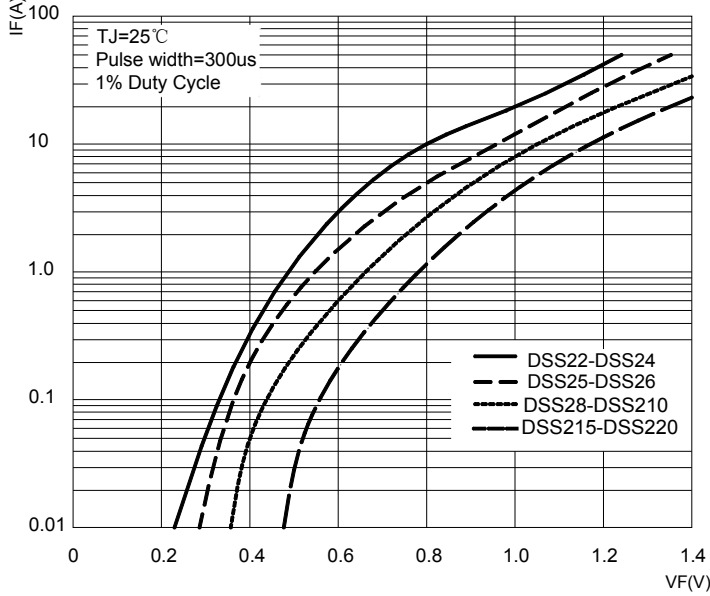
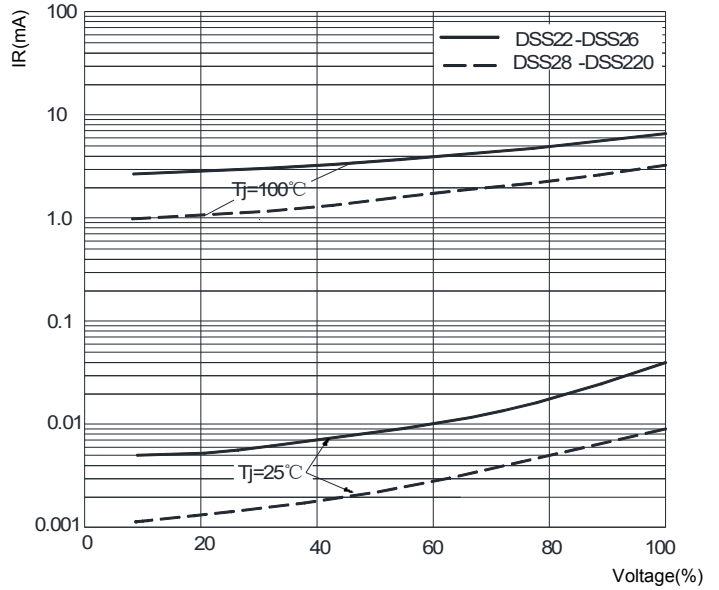
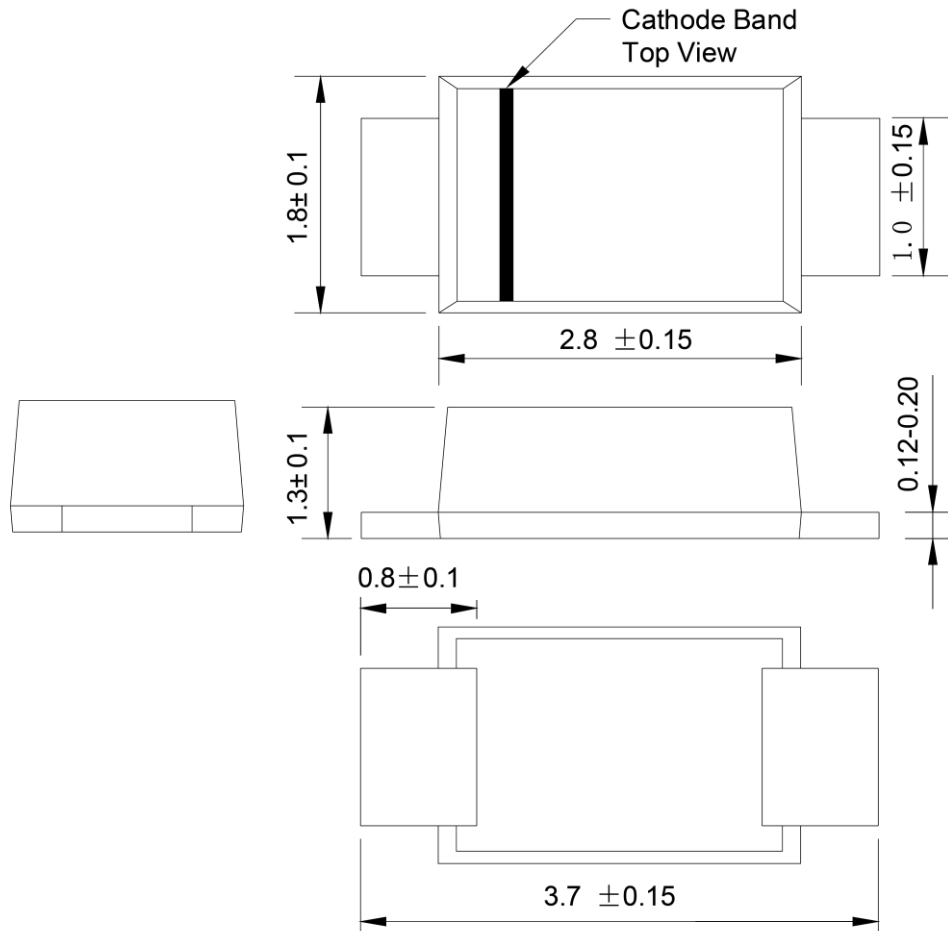


FIG 4: TYPICAL REVERSE CHARACTERISTICS

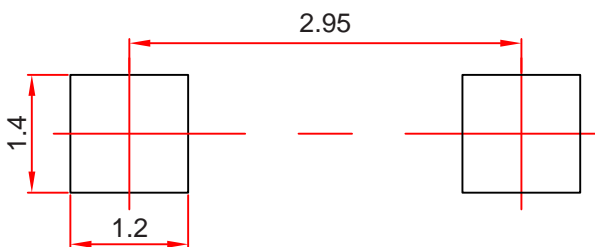


## SOD-123FL Package Outline Dimensions



*Dimensions in inches and (millimeters)*

## SOD-123FL Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.