



**DSS32-DSS320 Schottky Rectifier**

**Feature**

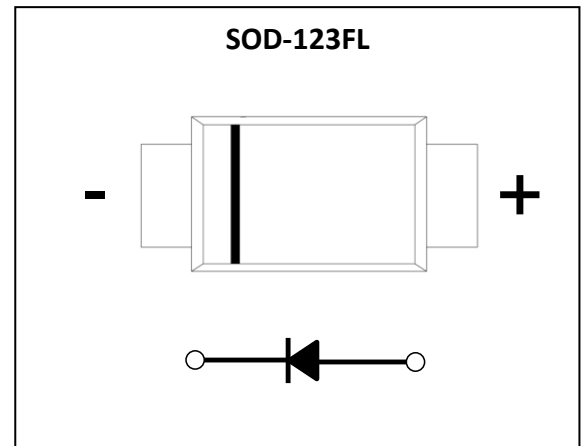
- High current capability
- Low VF
- High surge current capability

**Application**

- Rectifier

**Marking**

- **S3X**  
X: From 2 To 20



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

Parameter	Symbol	DSS3									Unit
		2	3	4	5	6	8	10	15	20	
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
Average Forward Current (60Hz Half-sine wave, Resistance load)	$I_{F(AV)}$	3.0									A
Non-repetitive Peak Forward Surge Current (60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$ )	$I_{FSM}$	70									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	DSS3								Unit
			2	3	4	5	6	8	10	15	
Peak Forward Voltage	$V_F$	$I_F=3\text{A}$	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	55								$^\circ\text{C/W}$

**Notes:**

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

**Typical Characteristics**

FIG.1: FORWARD CURRENT DERATING CURVE

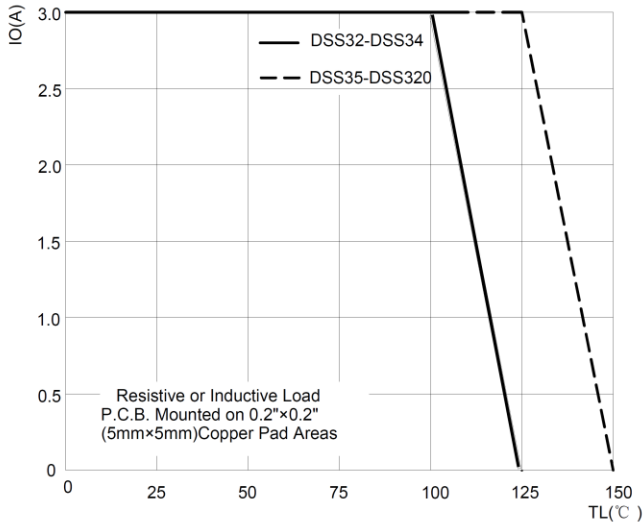


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

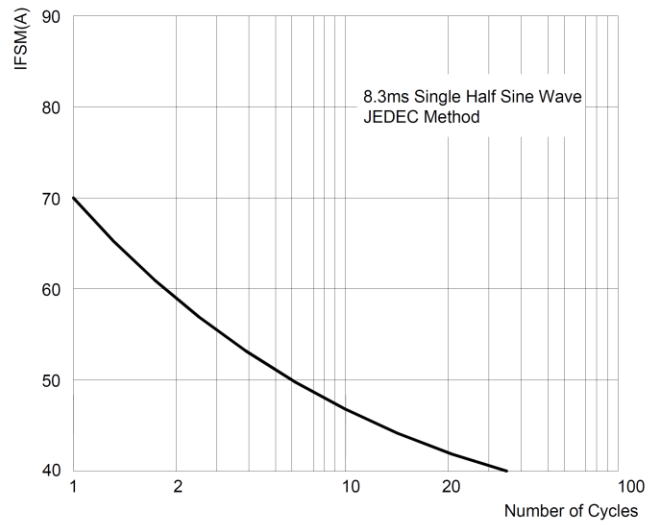


FIG.3: TYPICAL FORWARD CHARACTERISTICS

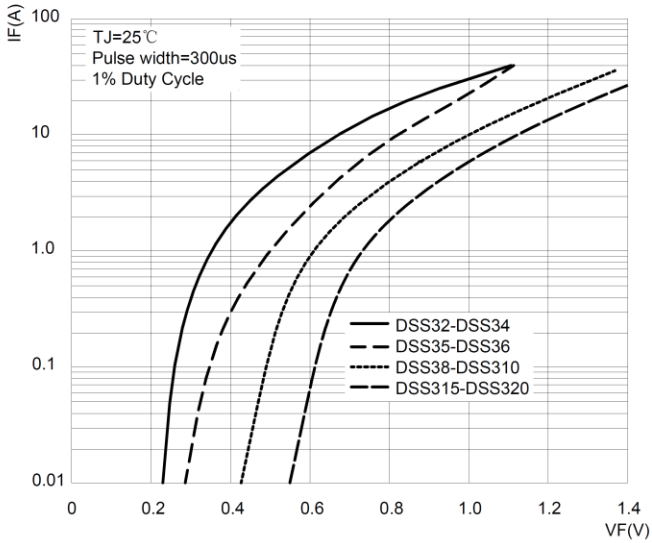
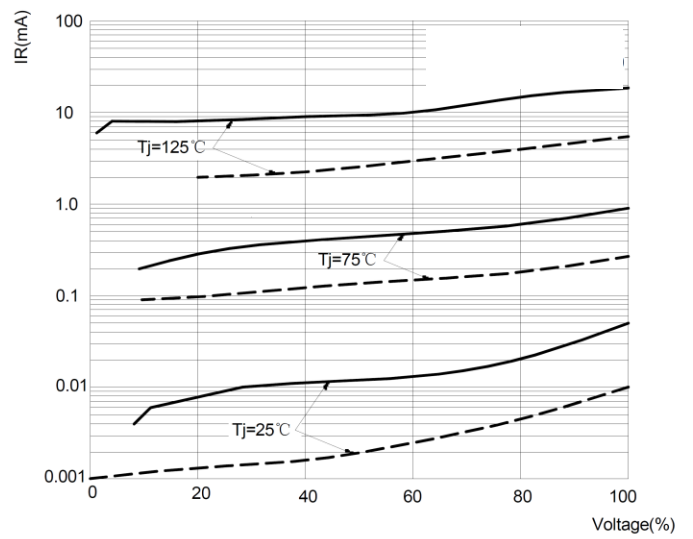
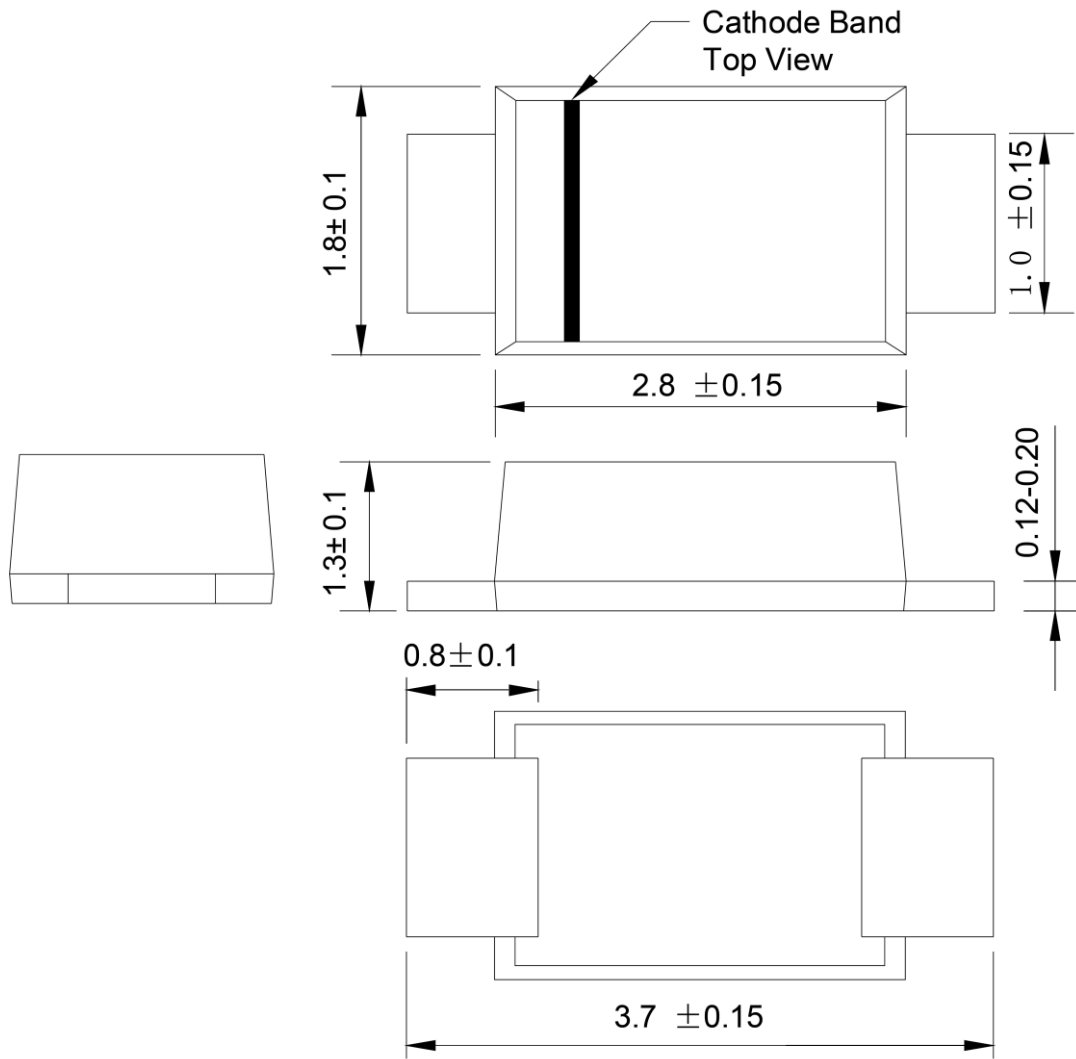


FIG.4: TYPICAL REVERSE CHARACTERISTICS



**SOD-123FL Package Outline Dimensions**


*Dimensions in inches and (millimeters)*