



DSS12-DSS110 Schottky Rectifier

Feature

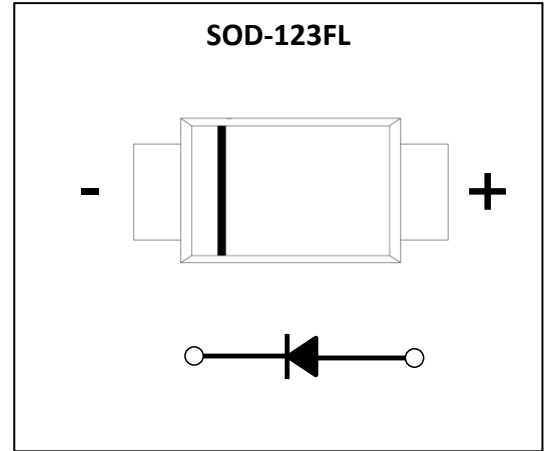
- High current capability
- Low VF
- High surge current capability

Application

- Rectifier

Application

- S1X
X: From 2 To 10



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

Parameter	Symbol	DSS								Unit
		12	13	14	15	16	18	19	110	
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Average Forward Current (60HZ Half-sine wave, Resistance load, TL(Fig.1))	$I_{F(AV)}$	1.0								A
Non-repetitive Peak Forward Surge Current (60Hz Half-sine wave ,1 cycle , $T_a =25^{\circ}\text{C}$)	I_{FSM}	30								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
			12	13	14	15	16	18	19	
Peak Forward Voltage	V_F	$I_F = 1\text{A}$	0.55		0.70		0.85			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		5.0			mA
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient	88							$^{\circ}\text{C}/\text{W}$
	$R_{\theta J-L}$	Between junction and terminal	28							$^{\circ}\text{C}/\text{W}$

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

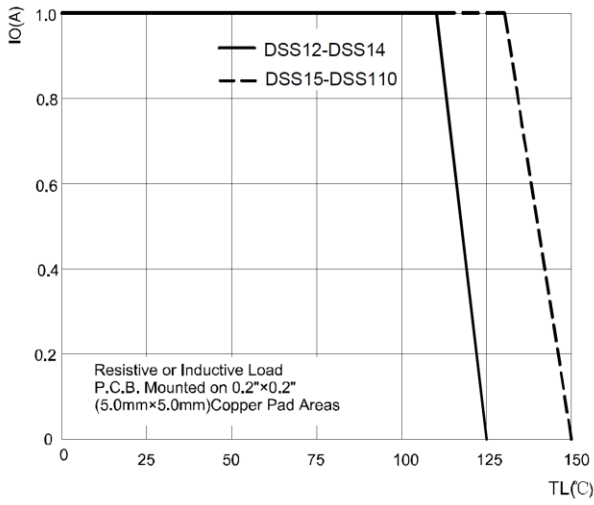


FIG2: Surge Forward Current Capadility

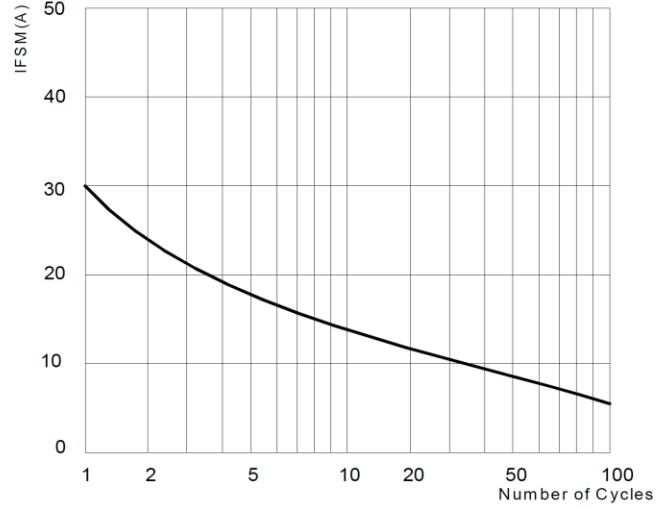


FIG3: TYPICAL FORWARD CHARACTERISTICS

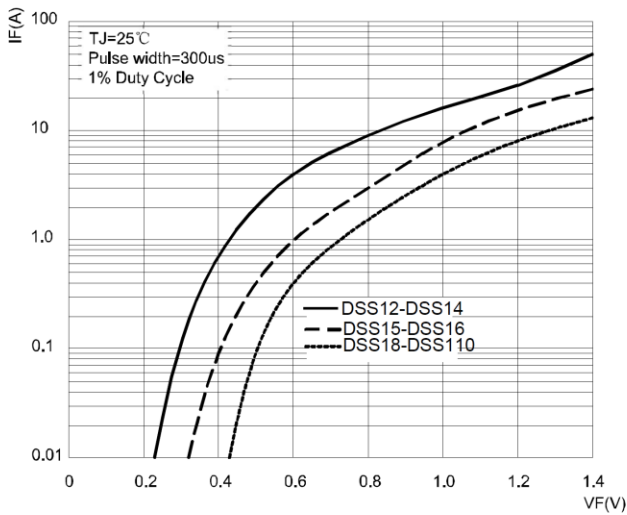
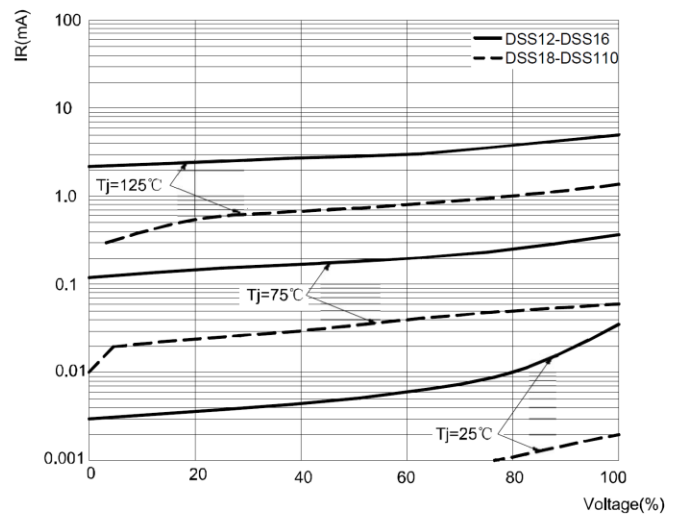
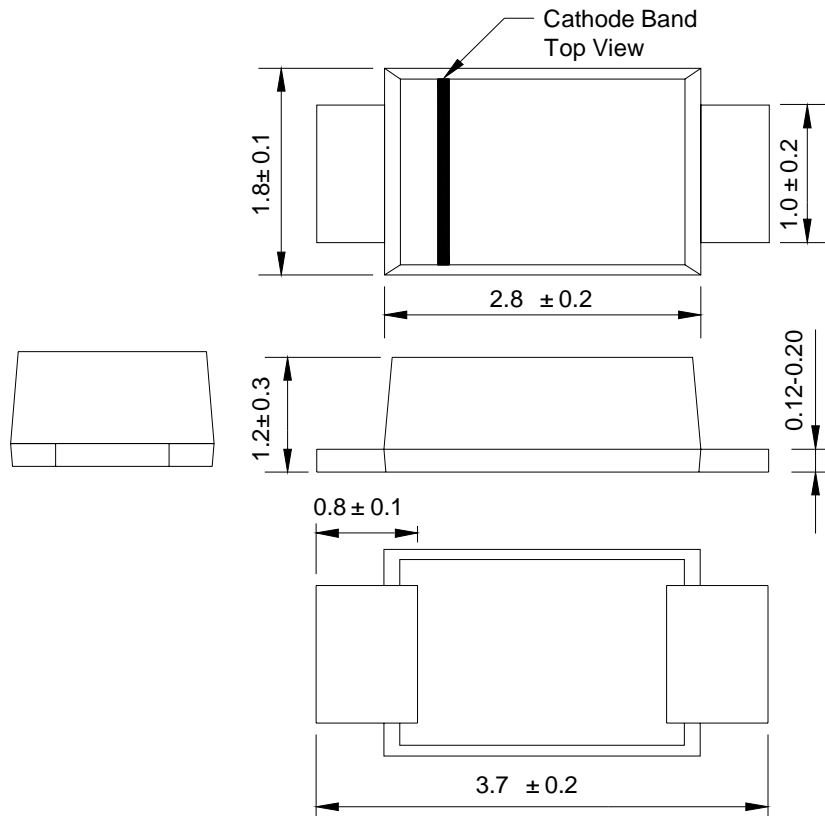


FIG.4 : TYPICAL REVERSE CHARACTERISTICS

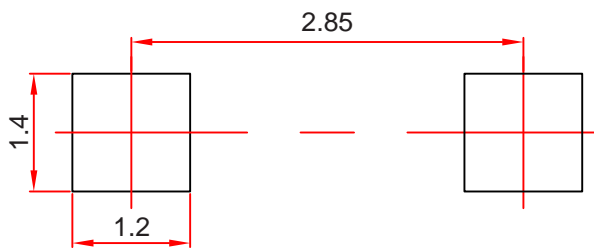


SOD-123FL Package Outline Dimensions



Dimensions in millimeters

SOD-123FL Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.