

**Features**

- $I_{F(AV)}$  3A
- $V_{RRM}$  20V-200V
- High surge current capability
- Polarity: Color band denotes cathode



SOD-123FL top view

Schematic diagram

**Applications**

- Rectifier

**Marking**

- DSS32-DSS320 : S32-S320


**Halogen-Free**
**Maximum Ratings ( $T_a=25^\circ\text{C}$  unless otherwise noted)**

Symbol	Item	Test Conditions	DSS3										Unit
			2	3	4	5	6	8	10	15	20		
$V_{RRM}$	Repetitive Peak Reverse Voltage		20	30	40	50	60	80	100	150	200	V	
$V_{RMS}$	Maximum RMS voltage		14	21	28	35	42	56	70	105	140	V	
$I_{F(AV)}$	Average Forward Current	60Hz Half-sine wave Resistance load	3.0									A	
$I_{FSM}$	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	80									A	
$T_j, T_{stg}$	Operating and Storage Temperature Range		-55--+150									$^\circ\text{C}$	

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

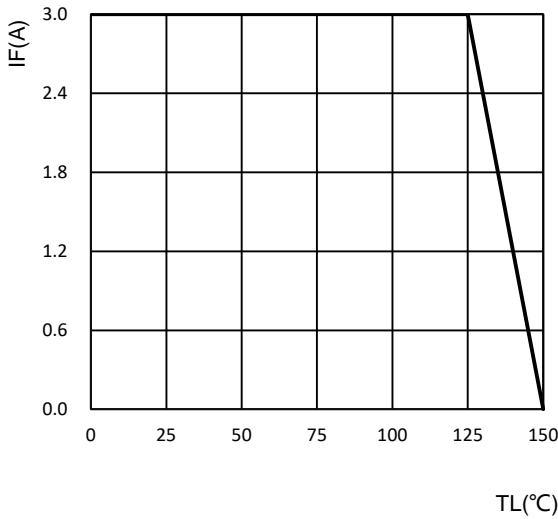
Symbol	Item	Test Condition		DSS3										Unit
				2	3	4	5	6	8	10	15	20		
$V_{FM}$	Peak Forward Voltage	$I_F=3.0\text{A}$	$T_a=25^\circ\text{C}$	0.55		0.7		0.85		0.95		V		
$I_{RRM1}$	Peak Reverse Current	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	0.5				0.1				mA		
$I_{RRM2}$		$V_{RM}=V_{RRM}$	$T_a=100^\circ\text{C}$	10				5.0						
$R_{\theta JA}$	Thermal Resistance(Typical)	Between junction and ambient		54								$^\circ\text{C/W}$		
$R_{\theta JL}$		Between junction and lead		8.5										
$C_j$	Junction Capacitance (Typical)	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C		146		117		85		66 57		pF		

**Ordering Information (Example)**

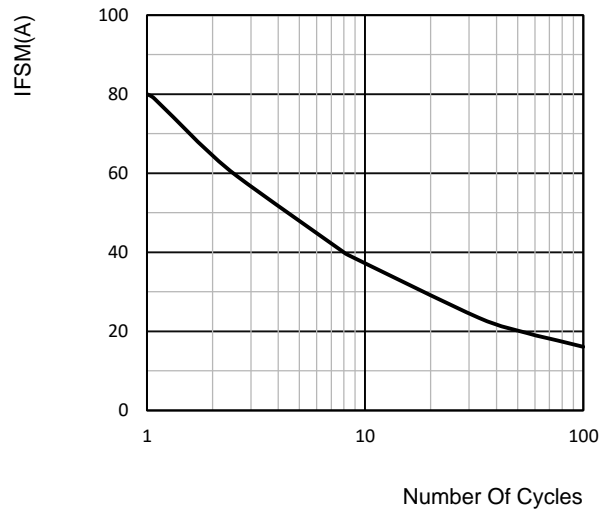
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
DSS32	SOD-123FL	S32	3,000	45,000	180,000	7" reel
DSS33		S33				
DSS34		S34				
DSS35		S35				
DSS36		S36				
DSS38		S38				
DSS310		S310				
DSS315		S315				
DSS320		S320				

**Typical Characteristics**

**Fig.1 Forward Current Derating Curve**

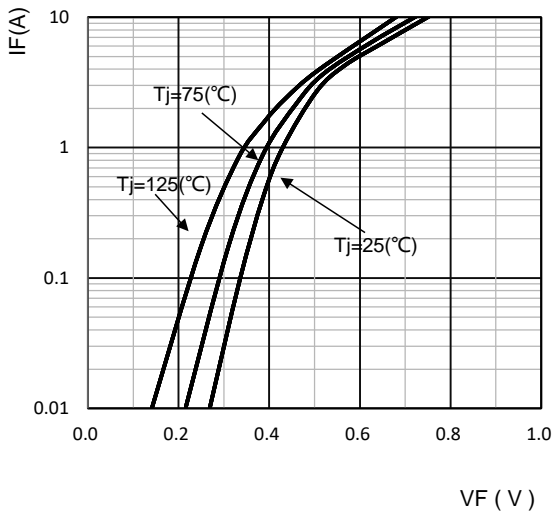


**Fig.2 Maximum Non-Repetitive Forward Surge Current**



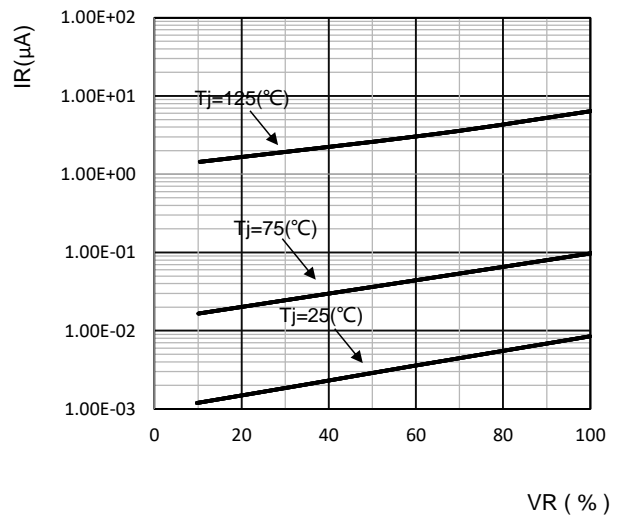
DSS32-DSS34

**Fig.3 Typical Forward Characteristics**



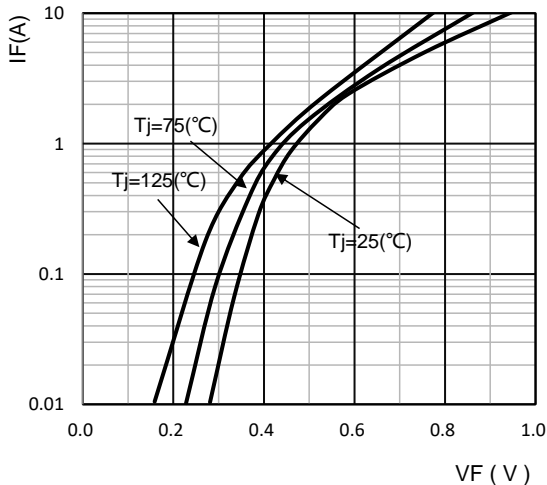
DSS32-DSS34

**Fig.4 Typical Reverse Characteristics**



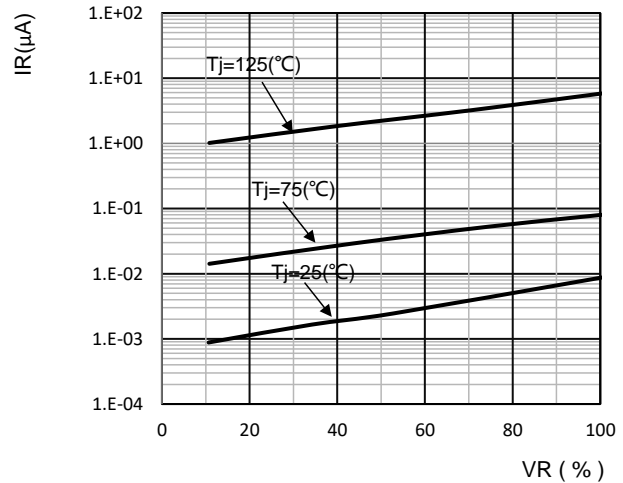
DSS35-DSS36

**Fig.5 Typical Forward Characteristics**



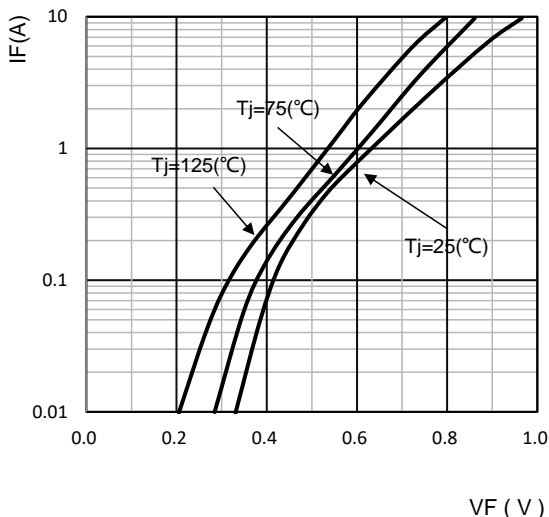
DSS35-DSS36

**Fig.6 Typical Reverse Characteristics**



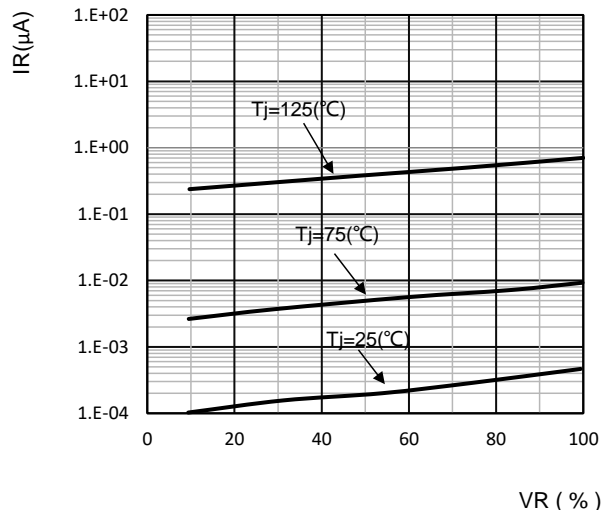
DSS38-DSS310

Fig.7 Typical Forward Characteristics



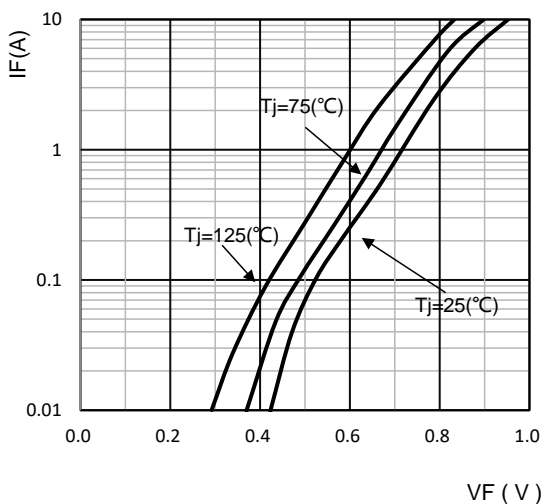
DSS38-DSS310

Fig.8 Typical Reverse Characteristics



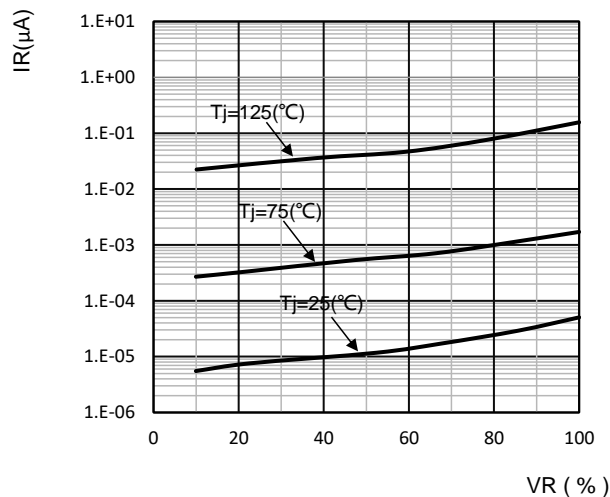
DSS315

Fig.9 Typical Forward Characteristics



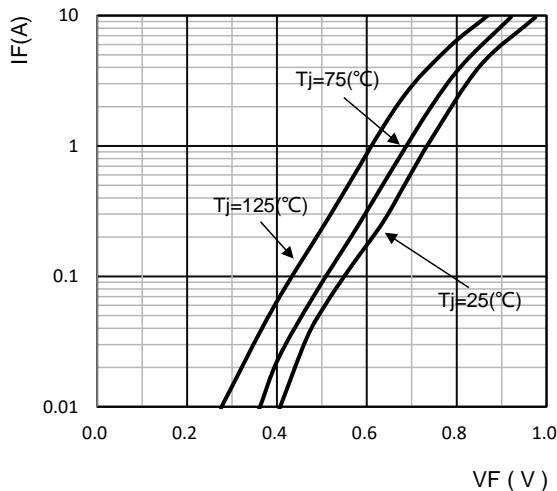
DSS315

Fig.10 Typical Reverse Characteristics



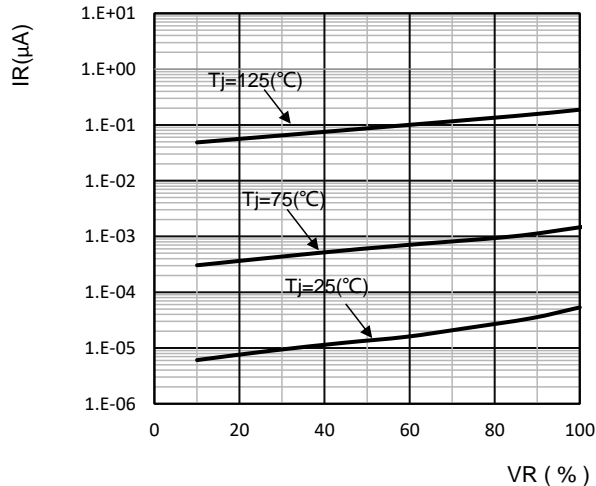
DSS320

Fig.11 Typical Forward Characteristics

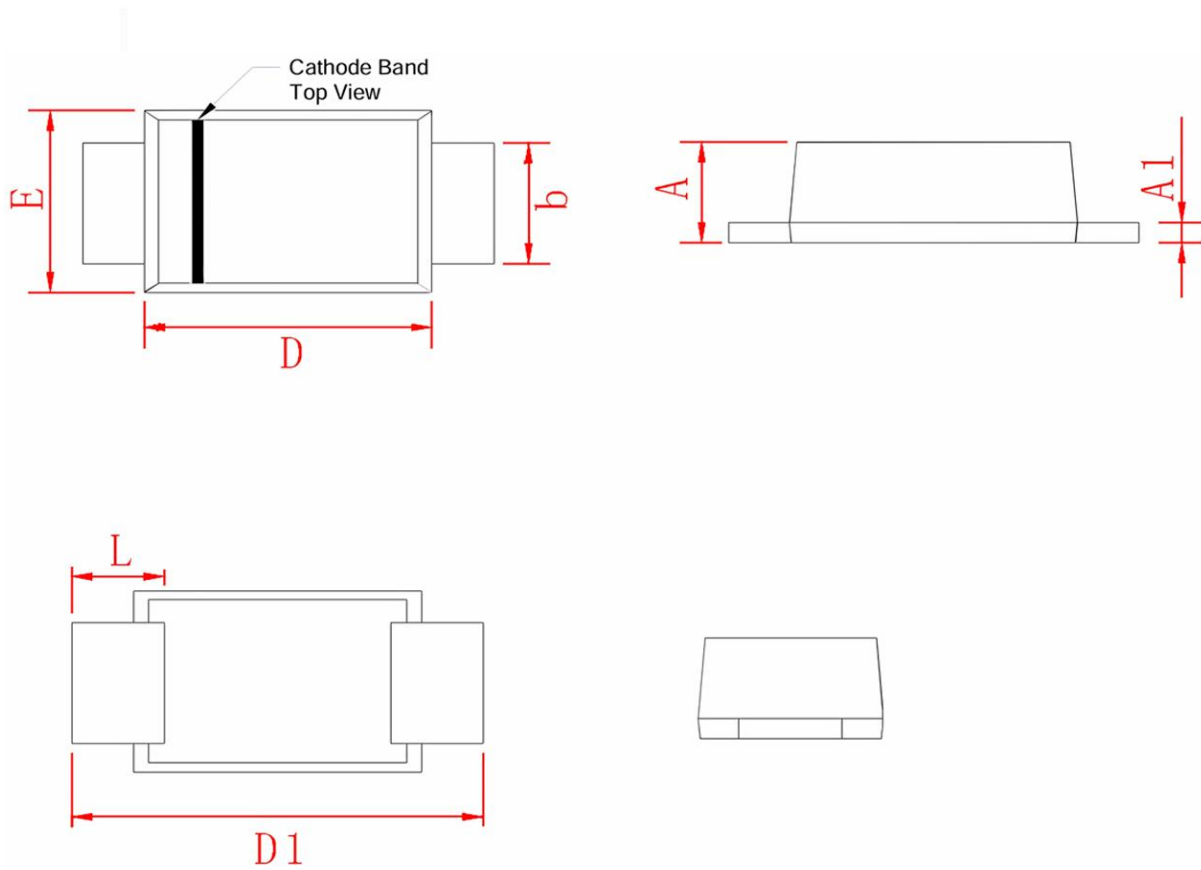


DSS32-DSS34

Fig.12 Typical Reverse Characteristics



**SOD-123FL Package information**



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.200	1.400	0.047	0.055
A1	0.120	0.250	0.005	0.010
b	0.850	1.150	0.033	0.045
D	2.650	2.950	0.104	0.116
D1	3.550	3.850	0.140	0.152
E	1.700	1.900	0.067	0.075
L	0.500	0.900	0.020	0.035