CHONGQING CLOUDCHILD TECHNOLOGY CO., LTD

DSS22-DSS210 Plastic-Encapsulate Diodes

DSS22-DSS210 Schottky Rectifier

Features

- Io   2A.

- VRRM   20V-100V.

- High surge current capability.

- Polarity:Color band denotes cathode.

- AEC-Q101 Qualified.

Application

- Rectifier.

Marking

- DSS22-DSS210：S22-S210.
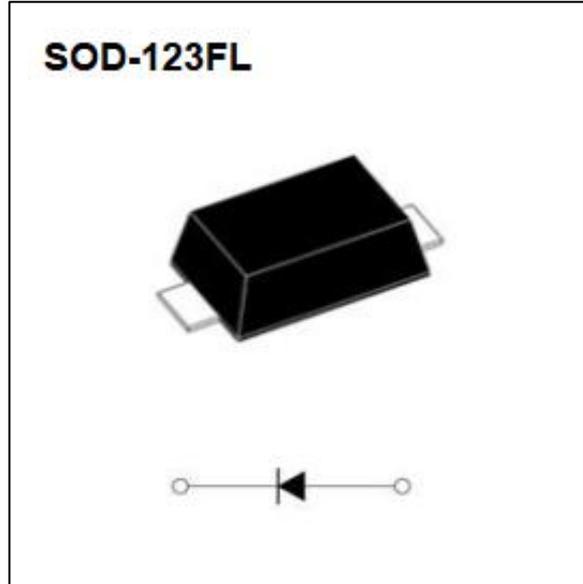
ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Item	Symbol	Unit	Test Conditions	DSS						
				22	23	24	25	26	28	210
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100
Maximum RMS Voltage		V		20	30	40	50	60	80	100
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load,TL(Fig.1)	2.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , Ta=25℃	40						
Junction Temperature	T_J	℃		-55 ~ +150						
Storage Temperature	T_{STG}	℃		-55 ~ +150						

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

Item	Symbol	Unit	Test Condition		DSS 22	23	24	25	26	28	210
Peak Forward Voltage	V_F	V	I_F=2.0A		0.55			0.70		0.85	
Peak Reverse Current	I_{RRM1}	mA	V_{RM}=V_{RRM}	T_a=25℃	0.5					0.1	
	I_{RRM2}			T_a=100℃	10			5.0			
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		75[1]						
	$R_{\theta J-L}$		Between junction and terminal		17[1]						

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

IO (A) vs TL (°C)

Resistive or Inductive Load
P.C.B.Mounted on 0.2″✕0.2″
（5mm✕5mm）Copper Pad Areas
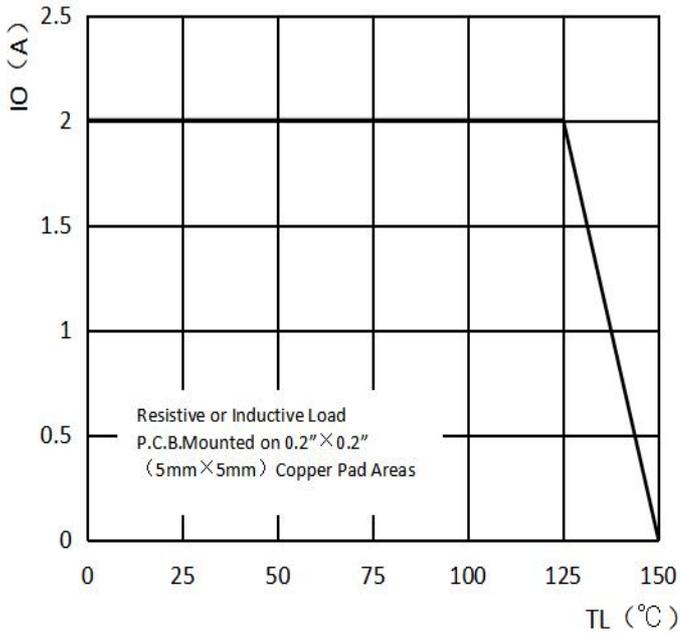
FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

IFSM(A) vs Number of Cycles
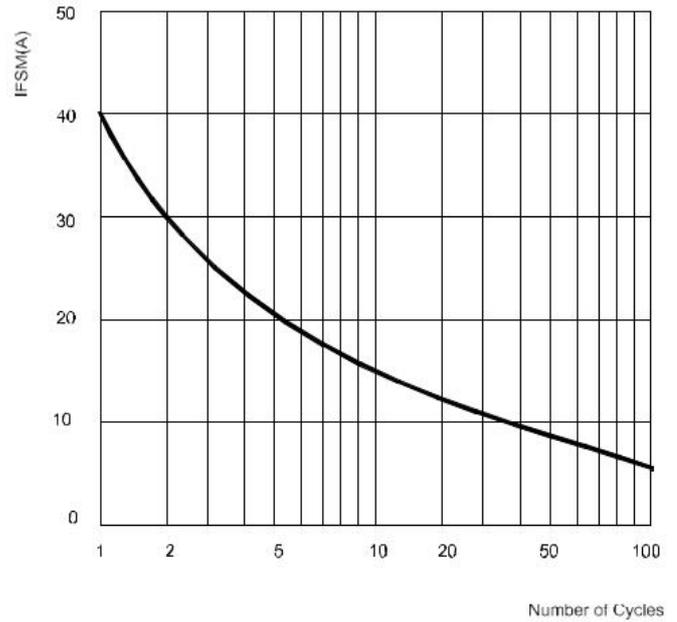
FIG.3: TYPICAL FORWARD CHARACTERISTICS

IF(A) vs VF(V)

TJ=25℃
Pulse width=300us
1% Duty Cycle

DSS22-DSS24
DSS25-DSS26
DSS28-DSS210
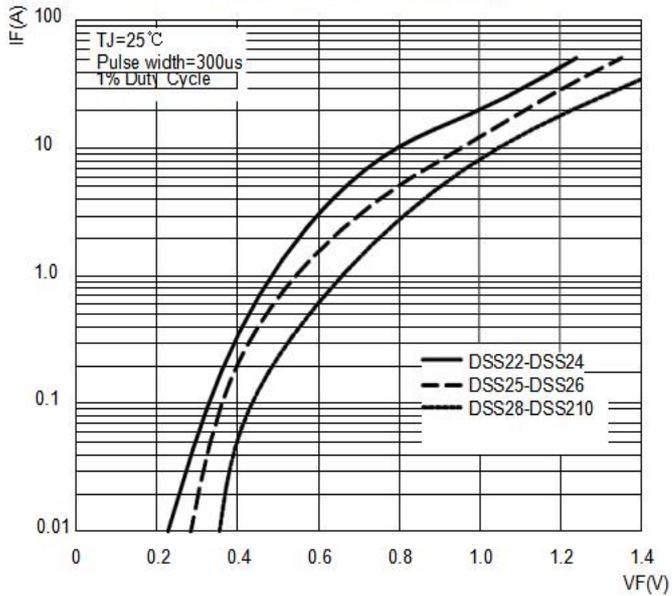
FIG.4: TYPICAL REVERSE CHARACTERISTICS

IR(mA) vs Voltage(%)

DSS22 -DSS26
DSS28 -DSS210

Tj=150℃
Tj=75℃
Tj=25℃
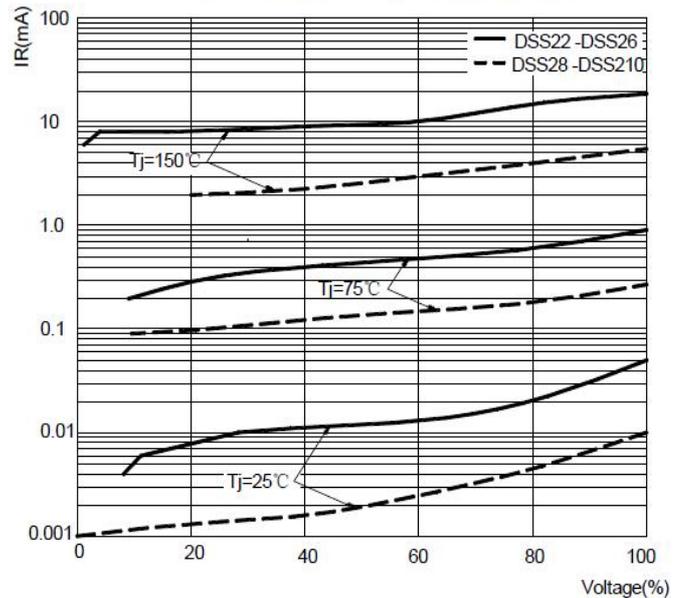
SOD-123FL Package Outline Dimensions

Cathode Band
Top View

1.8±0.1

1.0 ±0.15

2.8 ±0.15

1.3±0.1

0.12-0.20

0.8±0.1

3.7 ±0.15
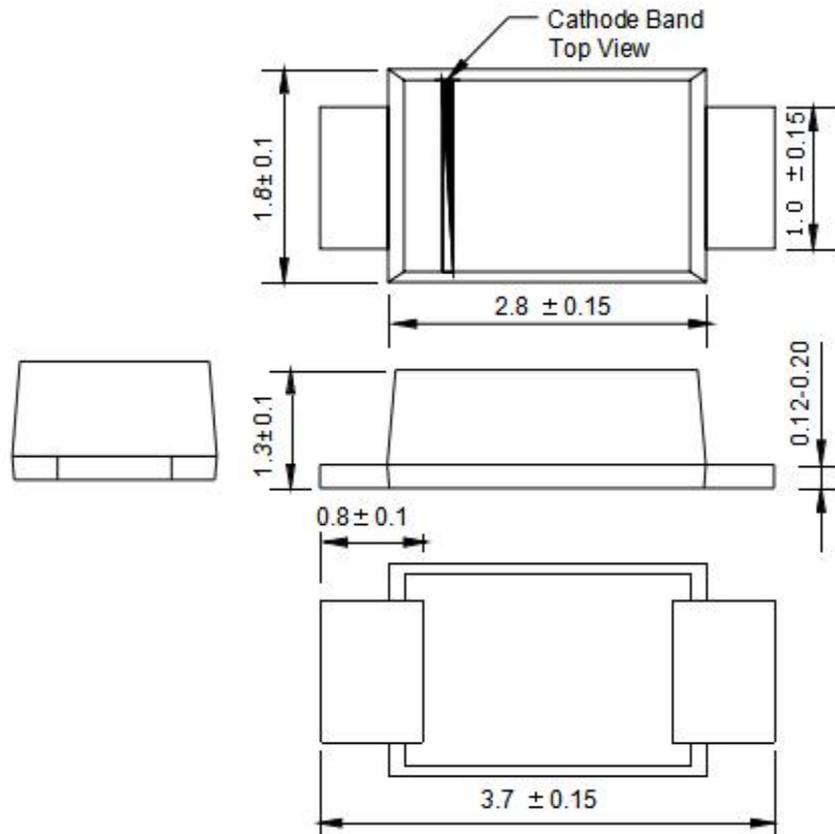
Dimensions in millimeters

SOD-123FL   Suggested Pad Layout

2.85

1.4

1.2
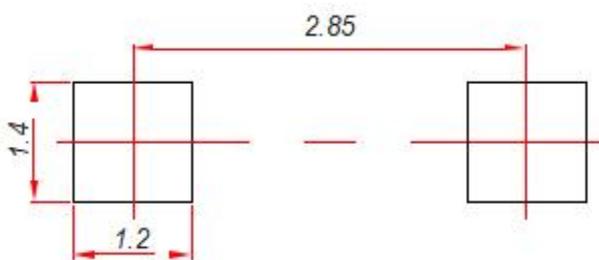
Note:
1. Controlling dimension:in millimeters.
2. General tolerance:± 0.05mm.
3. The pad layout is for reference purposes only.