Formosa MS

DSL12 THRU DSL120

1.0A Low VF Surface Mount Schottky Barrier Rectifiers - 20V-200V

Features

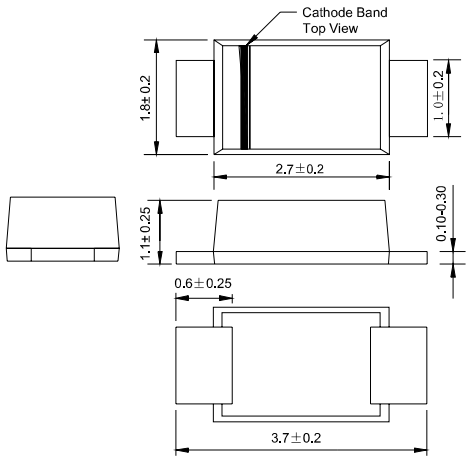
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds,0.375″(9.5mm) lead length, 5 lbs. (2.3kg) tension
- Compliant to RoHS Directive 2011/65/EU
- Compliant to Halogen-free

Mechanical data

- **Case**: JEDEC SOD-123 molded plastic body
- **Terminals**: Plated axial leads, solderable per MIL-STD-750, Method 2026
- **Polarity**: Color band denotes cathode end
- **Mounting Position**: Any

Package outline

SOD-123



Dimensions in millimeters

Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			25	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			1.0	mA
	V_R = V_{RRM} T_A = 100°C				20	
Thermal resistance	Junction to ambient NOTE 1	$R_{\theta JA}$		92		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		110		pF
Storage temperature		T_{STG}	-65		+150	°C

Note: 1.P.C.B. mounted with 0.2x0.2″(5.0x5.0mm) copper pad areas

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
DSL12	20	14	20	0.45	-55 to +125
DSL13	30	21	30		
DSL14	40	28	40		
DSL15	50	35	50	0.55	-55 to +150
DSL16	60	42	60		
DSL18	80	56	80	0.75	
DSL110	100	70	100		
DSL115	150	105	150	0.85	
DSL120	200	140	200		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@I_F=1.0A

http://www.formosagr.com
TEL:886-755-27188611
FAX:886-755-27188568

Document ID	Issued Date	Revised Date	Revision	Page.
FM-3070001	2003/03/08	2019/03/16	E	3

DSL12 THRU DSL120

Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

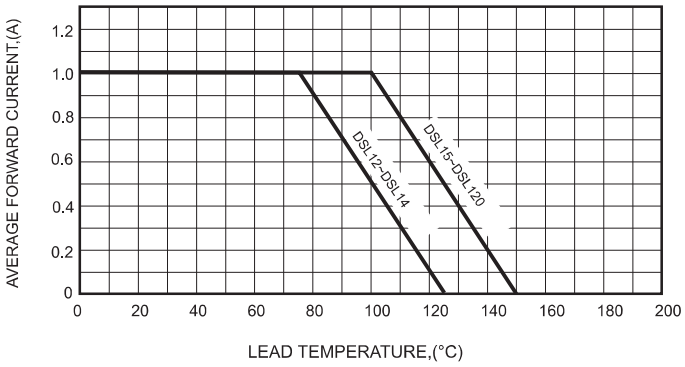


FIG.2-TYPICAL FORWARD CHARACTERISTICS

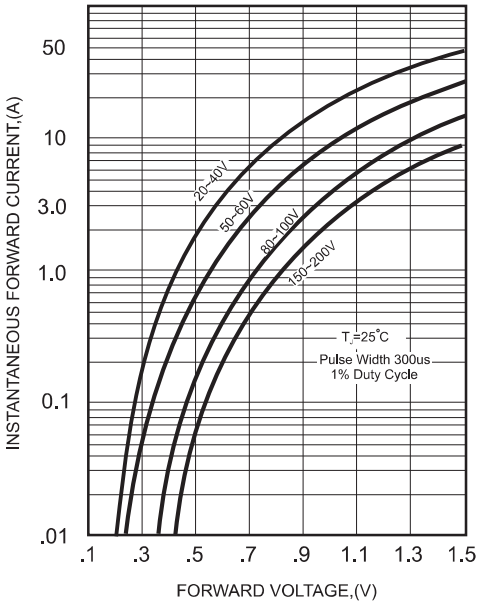


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

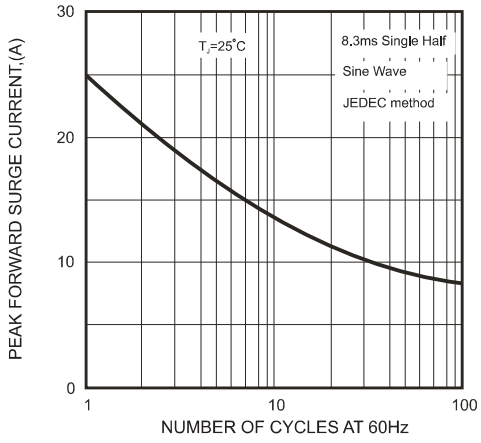


FIG.4-TYPICAL JUNCTION CAPACITANCE

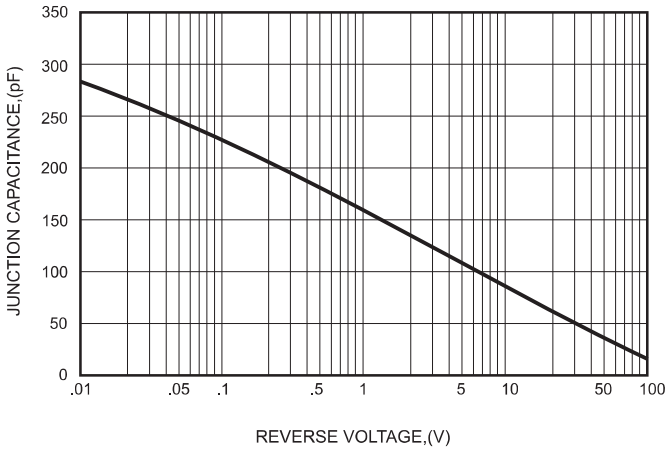
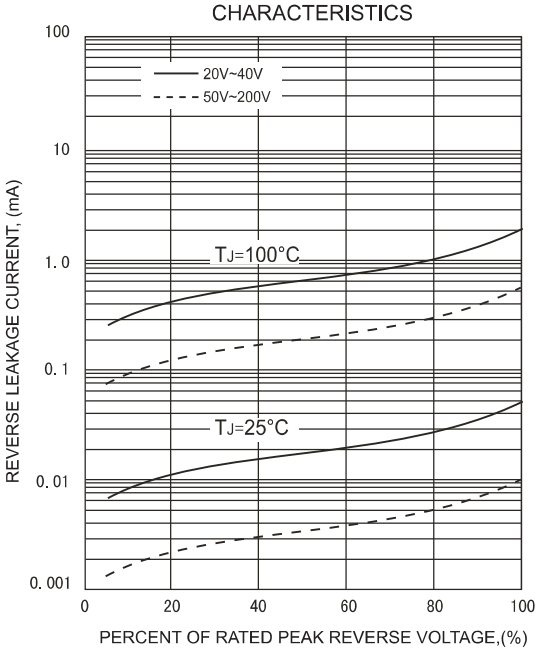


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



DSL12 THRU DSL120

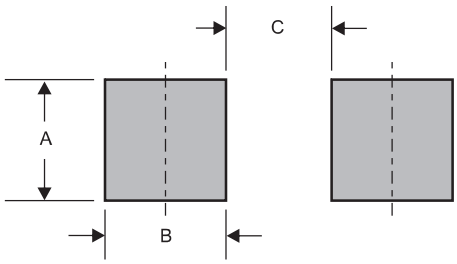
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
DSL12	12L
DSL13	13L
DSL14	14L
DSL15	15L
DSL16	16L
DSL18	18L
DSL110	10L
DSL115	115L
DSL120	120L

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.075 (1.90)	0.055 (1.40)	0.075 (1.90)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers ***category:***

Click to view products by AnBon ***manufacturer:***

Other Similar products are found below :

CUS06(TE85L,Q,M) MA4E2039 D1FH3-5063 MBR0530L-TP MBR10100CT-BP MBR30H100MFST1G MMBD301M3T5G PMAD1103-LF PMAD1108-LF RB160M-50TR RB520S-30 RB551V-30 DD350N18K DZ435N40K DZ600N16K BAS16E6433HTMA1 BAS 3010S-02LRH E6327 BAT 54-02LRH E6327 IDL02G65C5XUMA1 NSR05F40QNXT5G NSVR05F40NXT5G JANS1N6640 SB07-03C-TB-H SB1003M3-TL-W SBAT54CWT1G SBM30-03-TR-E SBS818-TL-E SK32A-LTP SK33A-TP SK34A-TP SK34B-TP SMD1200PL-TP ACDBN160-HF SS3003CH-TL-E STPS30S45CW PDS3100Q-7 GA01SHT18 CRS10I30A(TE85L,QM MBR1240MFST1G MBRB30H30CT-1G BAS28E6433HTMA1 BAS 70-02L E6327 HSB123JTR-E JANTX1N5712-1 VS-STPS40L45CW-N3 DD350N12K SB007-03C-TB-E SB10015M-TL-E SB1003M3-TL-E SK110-LTP