

Description

The DS12W~DS120W is Surface Mount Schottky Barrier Rectifier, SOD-123FL thin package.

Applications

- General purpose.

Features

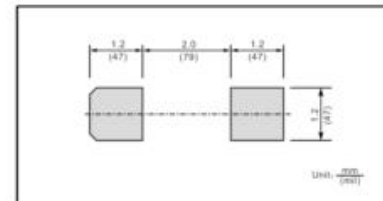
- Low power loss
- High efficiency
- High forward surge current capability
- For use in low voltage
- High frequency inverters
- And polarity protection applications
- For surface mounted applications
- Halogen free product

Equivalent Circuit & Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



Marking

- See Marking Instructions.

Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating								单位 Unit
		DS12W	DS14W	DS16W	DS18W	DS110W	DS112W	DS115W	DS120W	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0								A
Peak Forward Surge Current,8.3ms Single Half sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	40				30				A
Typical Junction Capacitance ¹⁾	C _i	110			80					pF
Typical Thermal Resistance ²⁾	R _{θJA}	115								°C/W
Operating Junction Temperature Range	T _j	-55~+125								°C
Storage Temperature Range	T _{stg}	-55~+150								°C

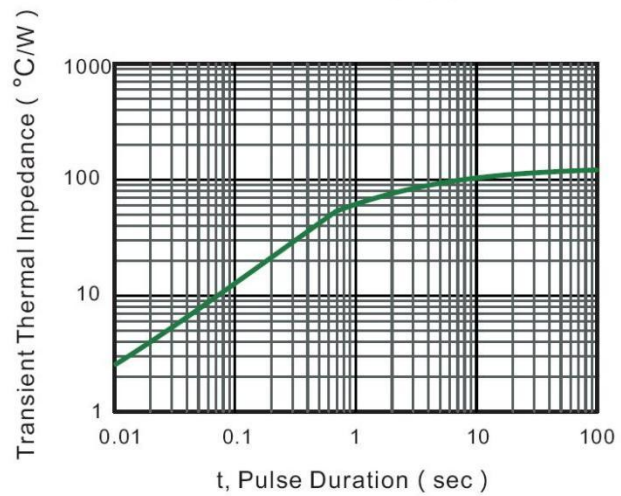
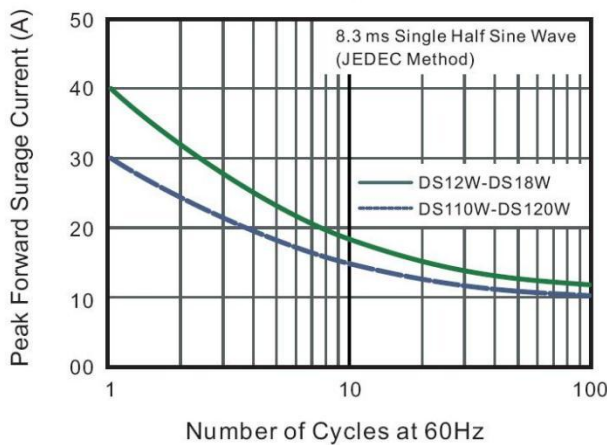
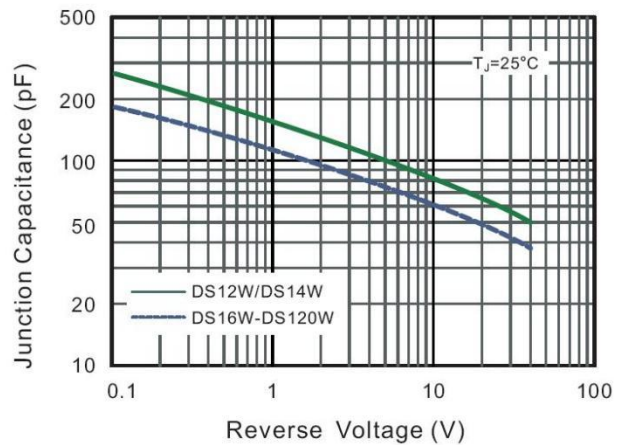
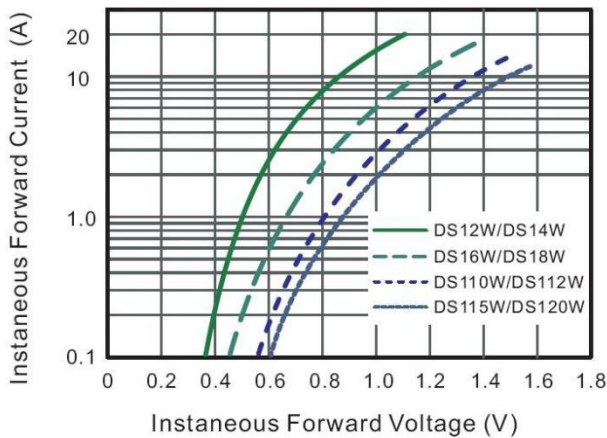
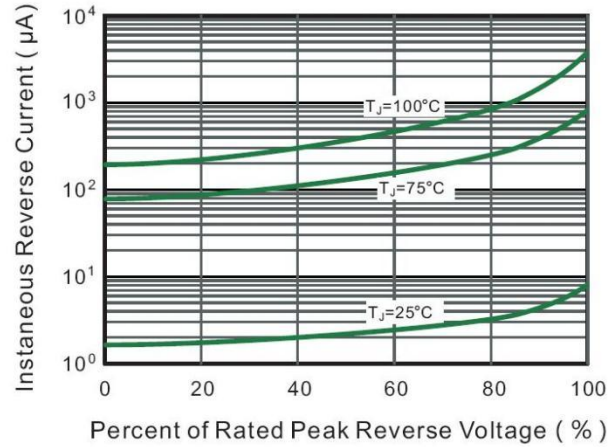
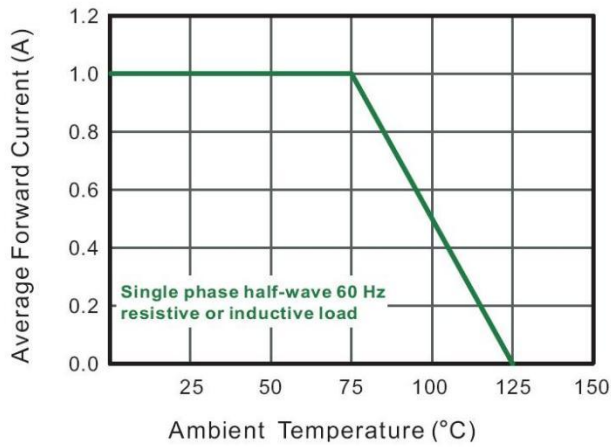
Note:

- 1) Measured at 1MHz and applied reverse voltage of 4 V D.C.
- 2) P.C.B. mounted with 0.2X0.2"(5X5mm) copper pad areas.

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Rating								Unit
			DS12W	DS14W	DS16W	DS18W	DS110W	DS112W	DS115W	DS120W	
Max Instantaneous Forward Voltage	V _F	I _F =1.0A	0.55		0.70		0.85		0.90		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I _R	T _a =25°C	0.3				0.2		0.1		mA
		T _a =100°C	10				5.0		2.0		

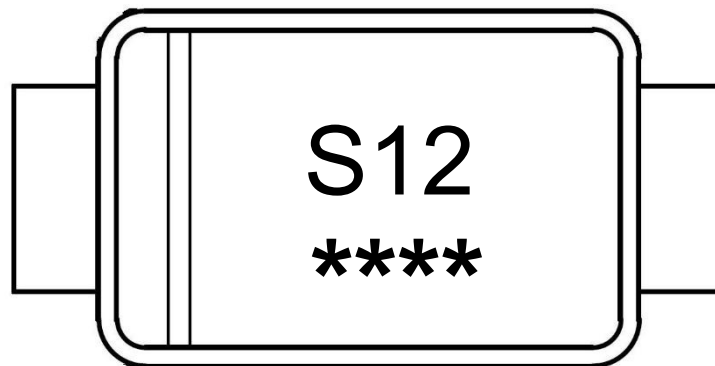
Electrical Characteristic Curve



Marking instructions

Marking

Type number	Marking code
DS12W	S12
DS14W	S14
DS16W	S16
DS18W	S18
DS110W	S110
DS112W	S112
DS115W	S115
DS120W	S120



Note:

S12 : Product Type Code

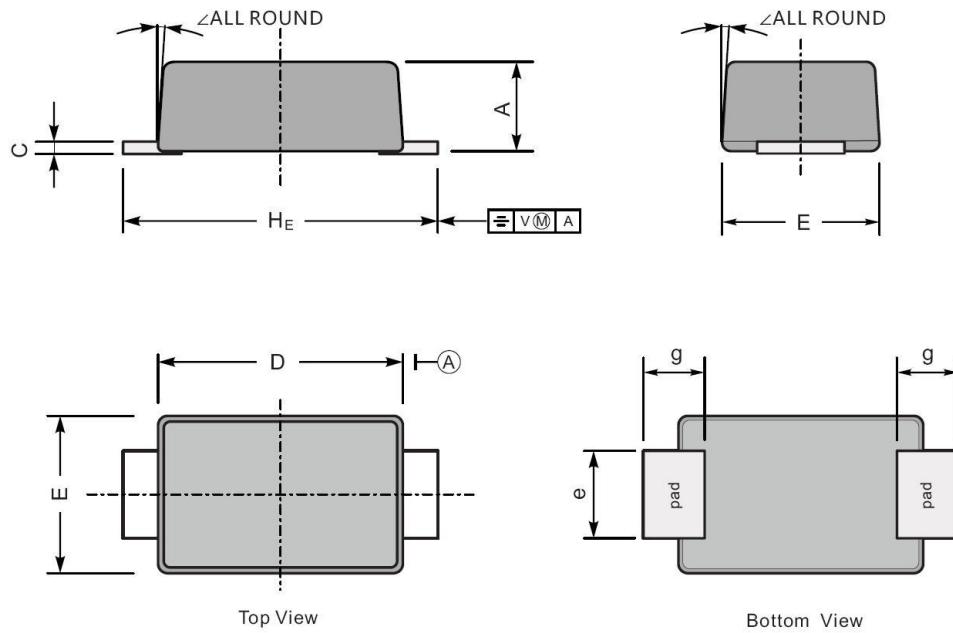
**** : Lot No. Code , The 1st * means:YM Code , The last 3 * means:little Lot No Code

Packaging SPEC.

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123FL	3000	8	24000	6	144000	7" ×8	185X180X105	390X385X205

Package Outline Dimensions

SOD-123FL



UNIT		A	C	D	E	e	g	H _E	\angle
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	