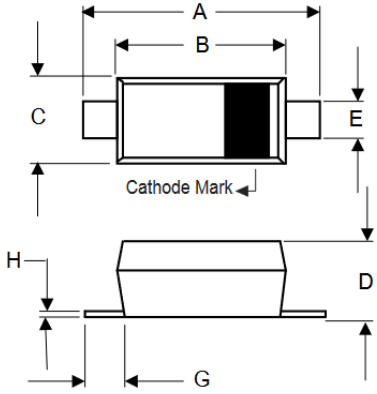


SMD Schottky Rectifier Diode

Primary characteristics		
Parameter	Value	Unit
Maximum Repetitive Peak Reverse Voltage	20 ~ 200	V
Maximum Average Forward Rectified Current	1.0	A

Features

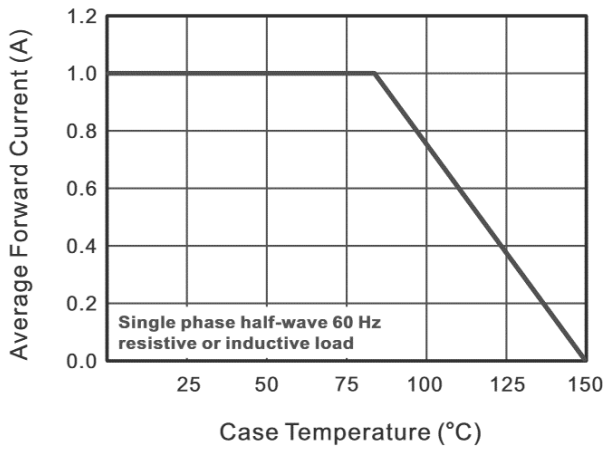
- **SOD-123FL** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Glass passivated device
- Low reverse leakage
- High temperature soldering guaranteed:
250°C/10 seconds/.375" (9.5mm) lead length at 5 lbs (2.3kg) tension
- Molded plastic body over passivated chip
- Polarity: color band denotes cathode end
- Solderable per MIL-STD-750, Method 2026
- Weight: 0.02g/0.0007oz

Case dimensions							
							
SOD-123FL							
Unit	A	B	C	D	E	G	H
mm	3.55 -0.25 +0.3	2.8 -0.25 +0.3	1.65 ±0.25	1.15 -0.25 +0.2	0.8 -0.3 +0.25	0.25 MIN	0.25 MAX

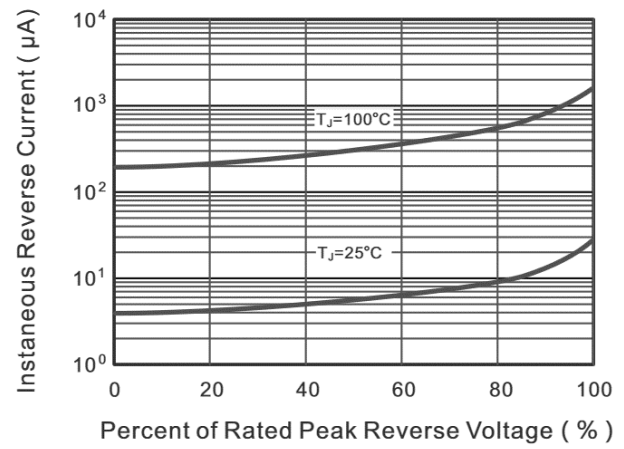
Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

Parameter		Symbol	Value								Unit
			DS12W	DS14W	DS16W	DS18W	DS110W	DS112W	DS115W	DS120W	
Marking code		-	K12	K14	K16	K18	K110	K112	K115	K120	
			S12	S14	S16	S18	S110	S112	S115	S120	
Maximum repetitive 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	
Maximum DC blocking voltage		V _{DC}	20	40	60	80	100	120	150	200	
Maximum average forward rectified current		I _(AV)	1.0								A
Peak forward surge current 8.3mS single half sine wave superimposed on rated load (JEDEC method), T _L =25°C		I _{FSM}	40				30				
Maximum instantaneous forward voltage @1.0A		V _F	0.55		0.7		0.85		0.9		V
Maximum instantaneous reverse current at rated DC reverse voltage	T _a =25°C	I _R	0.3				0.2		0.1		mA
	T _a =100°C		10				5.0		2.0		
Typical junction capacitance ¹⁾		C _j	110		80						pF
Typical thermal resistance ²⁾		R _{θJA}	100								°C/W
Operating junction and storage temperature range		T _J , T _{STG}	-55 ~ 150								°C
1) Measured at 1.0MHz and applied reverse voltage of 4.0VDC 2) PCB mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas											

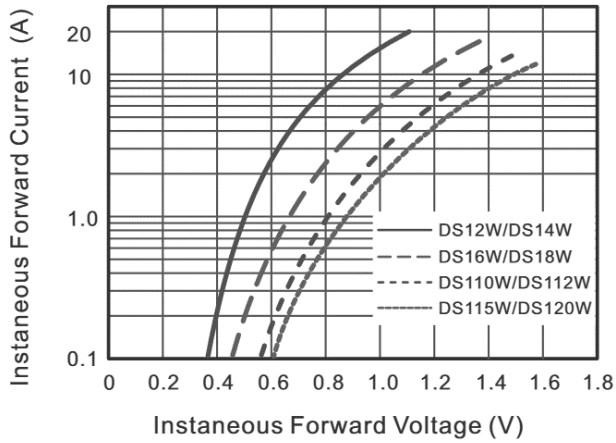
Forward current derating curve



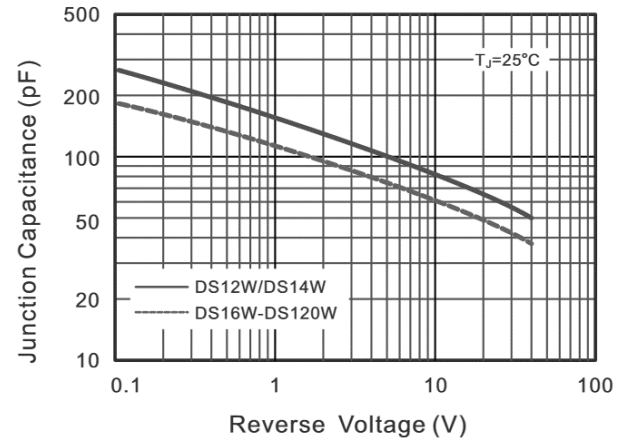
Typical reverse characteristics



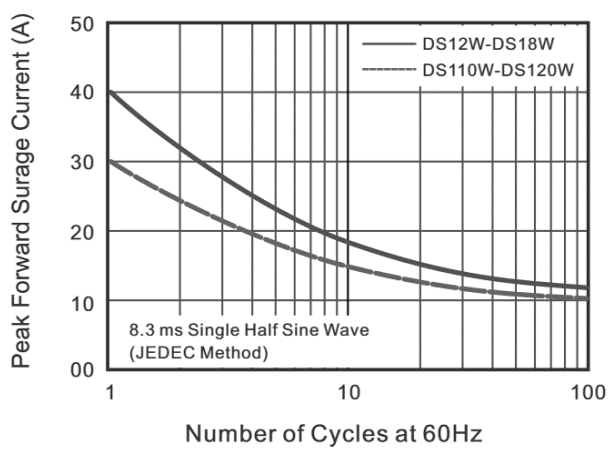
Typical forward characteristic



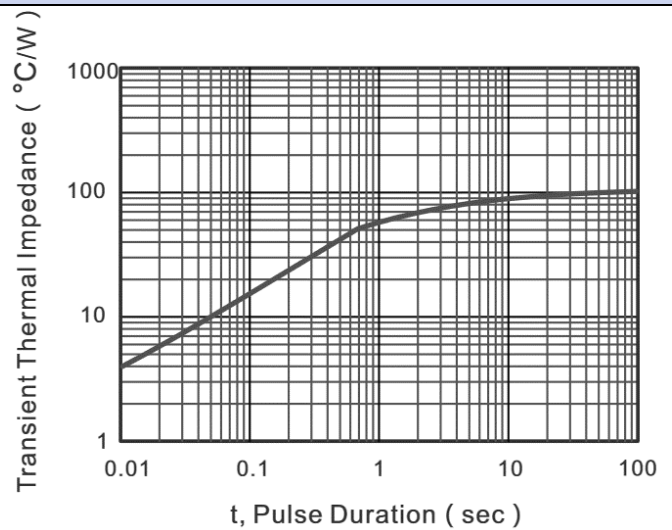
Typical junction capacitance

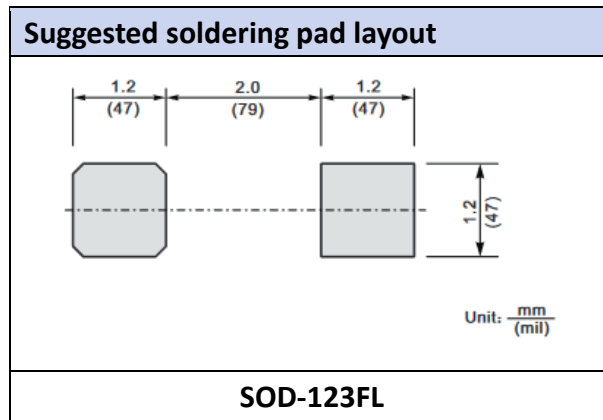


Maximum non-repetitive peak forward surge current



Typical transient thermal impedance





Ordering information			
Part Number	Package	Shipping Quantity	Industry standard
DS12W ~ DS120W	SOD-123FL	3 000 pcs / 7" reel 10 000 pcs / 13" reel	EIA-481-1

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