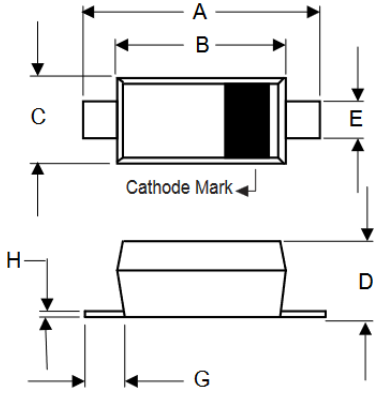


SMD Schottky Barrier Rectifier Diode

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
- Low power loss, high efficiency
- High forward surge current capability
- Metal silicon junction, majority carrier conduction
- High temperature soldering guaranteed:
250°C/10 seconds, 9.5mm lead length, 2.3kg tension
- Solderable per MIL-STD-750, Method 2026
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Weight: 0.02g / 0.0007 ounce

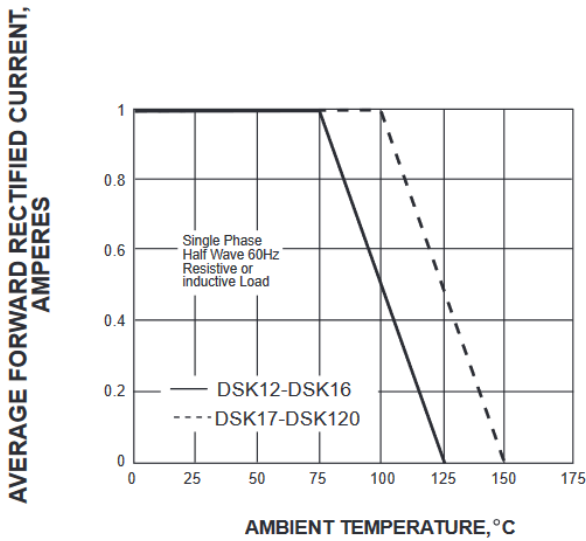
Case dimensions							
							
SOD-123FL							
Unit	A	B	C	D	E	G	H
mm	3.55 -0.25 +0.3	2.8 -0.25 +0.3	1.65 ±0.25	1.15 -0.25 +0.2	0.8 -0.3 +0.25	0.25 MIN	0.25 MAX

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

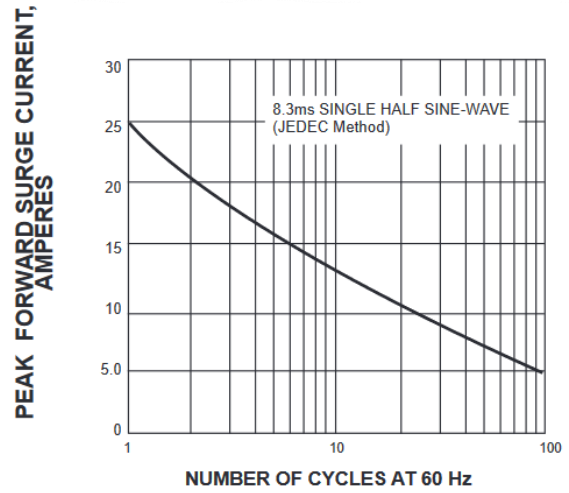
Parameter	Symbol	Value											Unit
		DSK12	DSK13	DSK14	DSK15	DSK16	DSK17	DSK18	DSK19	DSK110	DSK115	DSK120	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	100	125	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	70	80	90	100	150	200	
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}	25											
Maximum forward voltage @1.0A	V _F	0.55			0.70		0.85				0.95		V
Maximum DC reverse current at rated DC blocking voltage	I _R	0.5					0.2			2.0			mA
		10					5.0						
Typical junction capacitance @f=1.0MHz and V _R =4.0VDC	C _J	110				80							pF
Operating junction temperature range	T _J	-65 ~ 125					-65 ~ 150						°C
Storage temperature range	T _{STG}	-65 ~ 150											°C

Notes:
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

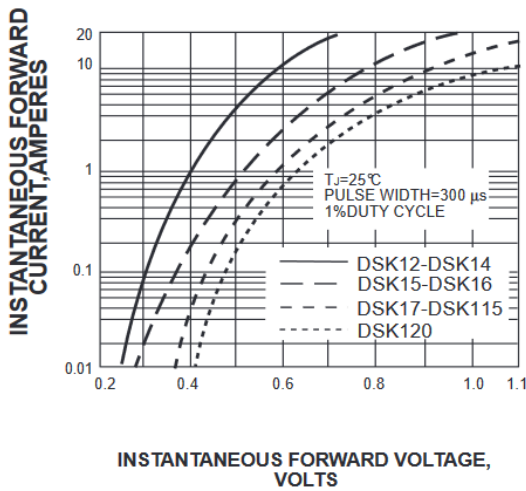
Forward current derating curve



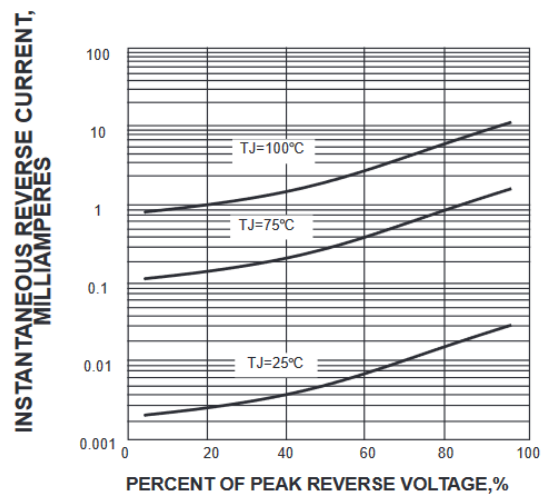
Maximum non-repetitive peak forward surge current



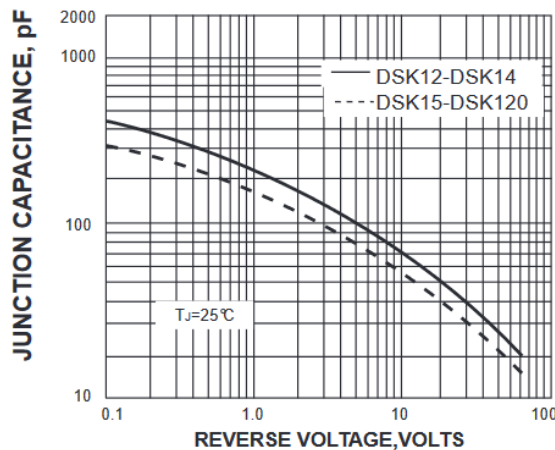
Typical instantaneous forward characteristics

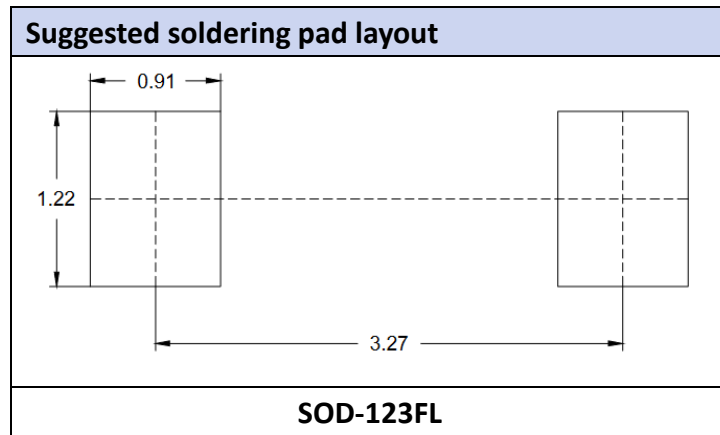


Typical reverse characteristics



Typical junction capacitance





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
DSK12 ~ DSK120	SOD-123FL	3 000 pcs / reel	---

Disclaimer

Akyga semi reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Akyga semi or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on Akyga semi data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Akyga semi does not assume any liability arising out of the application or use of any product or circuit. Akyga semi products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Akyga semi. Customers using or selling Akyga semi components for use in such applications do so at their own risk and shall agree to fully indemnify Akyga semi and its subsidiaries harmless against all claims, damages and expenditures.