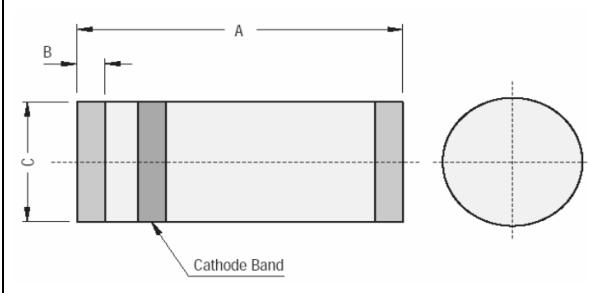


SMD General Purpose Rectifier Diode

Primary characteristics		
Parameter	Value	Unit
Maximum Repetitive Peak Reverse Voltage	50 ~ 1000	V
Maximum Average Forward Rectified Current	1.0	A

Features

- **DO-213AB** case for easy automatic insertion
- Pb-free and **RoHS** compliant
- Low reverse leakage
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Weight: 0.1296 grams
- Solderable per MIL-STD-750 Method 2026

Case dimensions			
			
DO-213AB			
Unit	A	B	C
mm	5.0 ±0.2	0.53 ±0.07	2.55 ±0.15

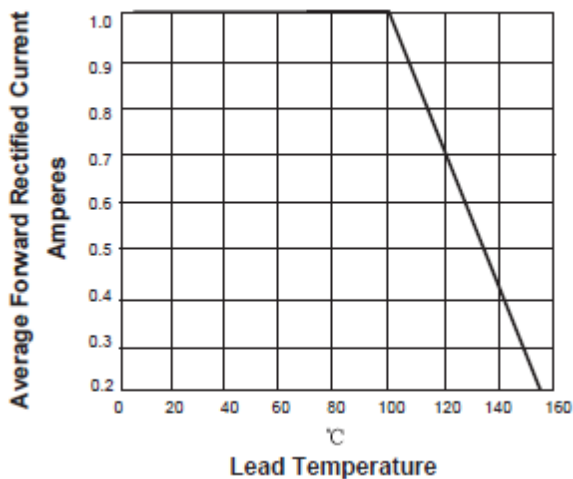
Absolute maximum ratings and general electrical characteristics (T _a = 25°C)									
Parameter	Symbol	Value							Unit
		SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified current ¹⁾	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	30							
Maximum instantaneous forward voltage @1.0A	V _F	1.0							V
Maximum DC reverse current at rated DC blocking voltage	T _a =25°C	2.0							μA
	T _a =125°C	200							

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

Parameter	Symbol	Value	Unit
Typical junction capacitance ²⁾	C _J	15	pF
Typical thermal resistance ³⁾	R _{θJA}	75	°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 ~ 150	°C

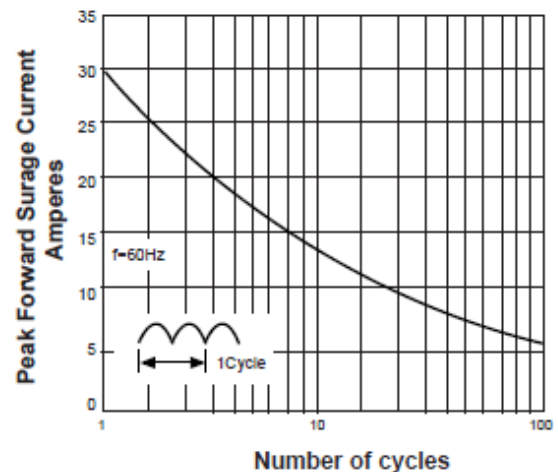
Output rectified current

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT



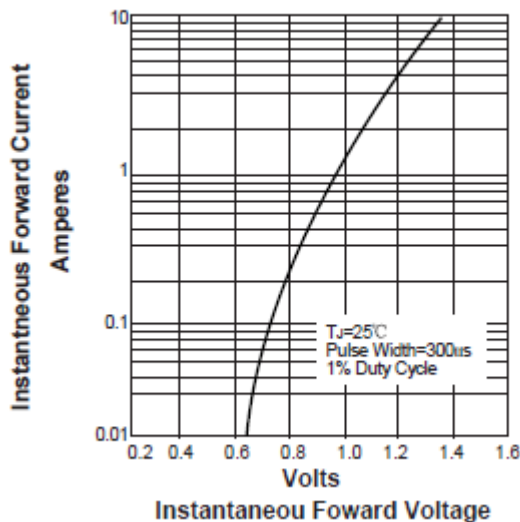
Maximum non-repetitive peak forward surge current

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG



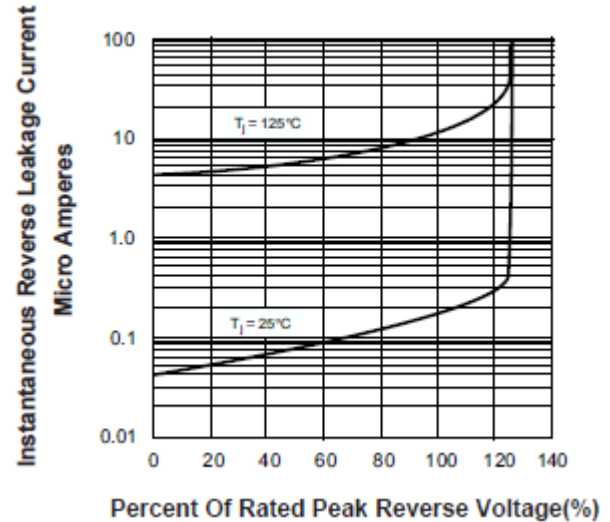
Typical forward characteristic

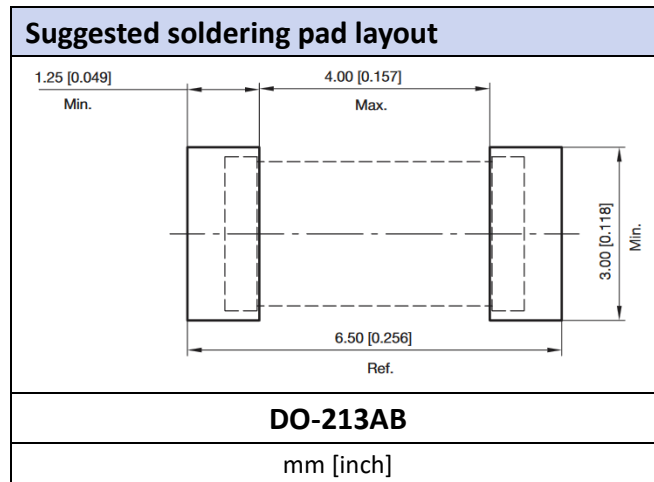
FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS



Typical junction capacitance

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
SM4001 ~ SM4007	DO-213AB	5 000 pcs / reel	---

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