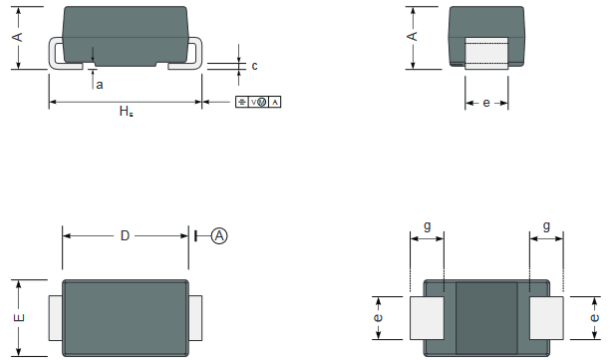


SMD Ultra Fast Recovery Rectifier Diode

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

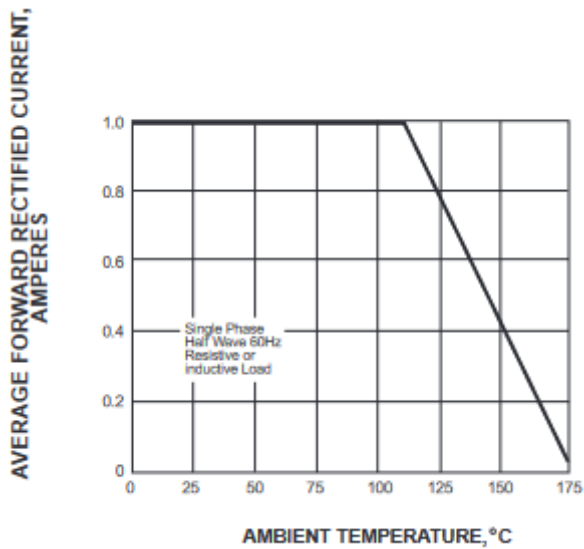
Features

- **SMA (DO-214AC)** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Glass passivated chip junction
- For surface mounted application
- High temperature soldering guaranteed:
250°C/10 seconds at terminals
- Plastic material used carries UL Classification 94V-0
- Solder plated, solderable per MIL-STD-750, Method 2026

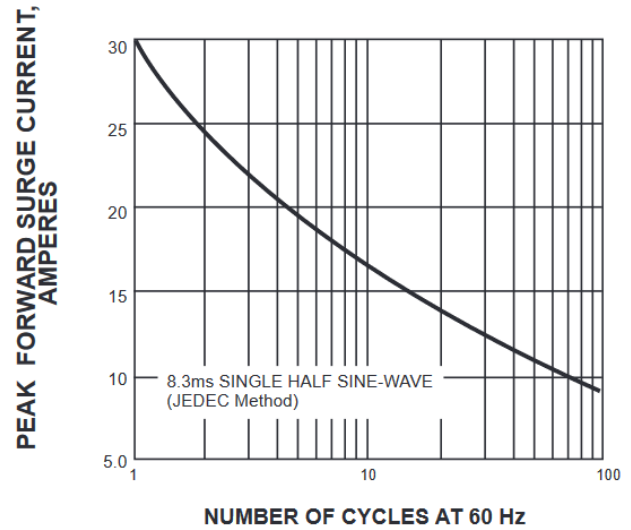
Case dimensions								
								
SMA (DO-214AC)								
Unit	A	D	E	H _E	c	e	g	a
mm	2.05 ±0.15	4.25 ±0.25	2.5 ±0.2	4.95 ±0.25	0.23 ±0.08	1.45 ±0.15	1.2 ±0.3	0.3

Absolute maximum ratings and general electrical characteristics (T _a = 25°C)										
Parameter		Symbol	Value						Unit	
			S1A	S1B	S1D	S1G	S1J	S1K		S1M
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 @T _L =110°C		I _{F(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	1.1						V	
Maximum DC reverse current at rated DC blocking voltage	T _a =25°C	I _R	5.0						μA	
	T _a =100°C		50							
Typical junction capacitance ¹⁾		C _J	15						pF	
Typical thermal resistance ²⁾		R _{θJA}	75						°C/W	
Operating junction and storage temperature range		T _J , T _{STG}	-65 ~ 175						°C	
1) Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2) P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas										

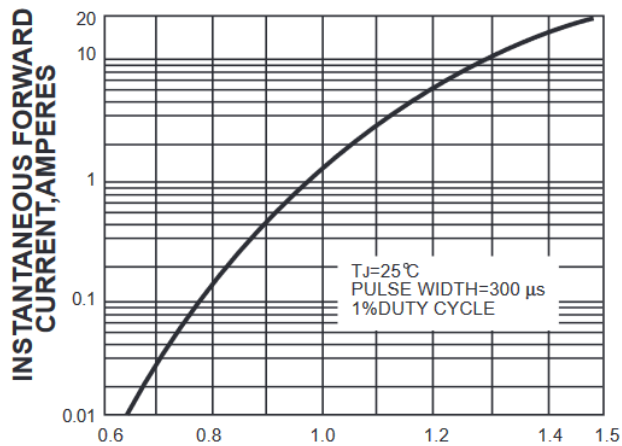
Forward current derating curve



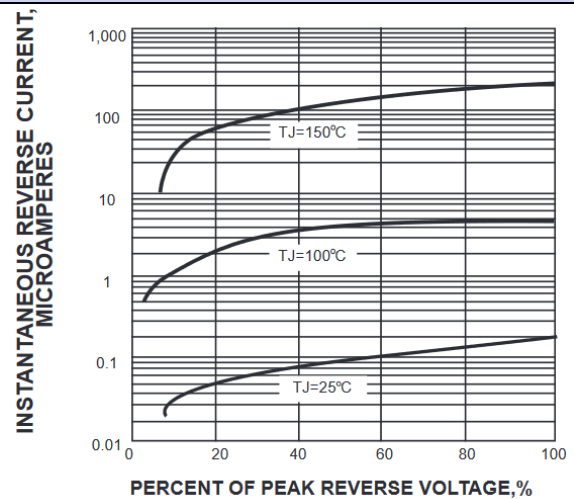
Maximum non-repetitive peak forward surge current



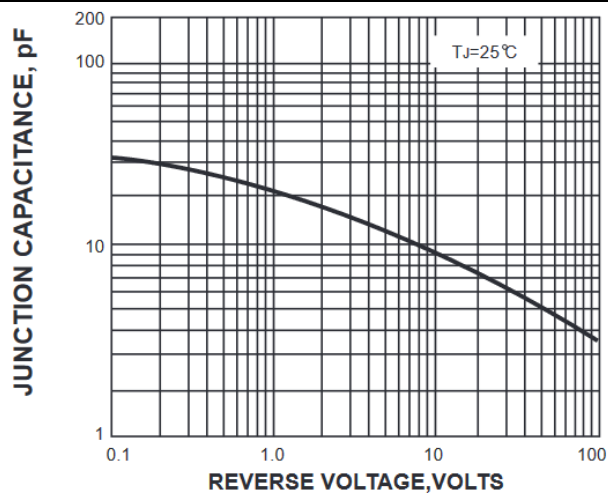
Typical forward characteristics



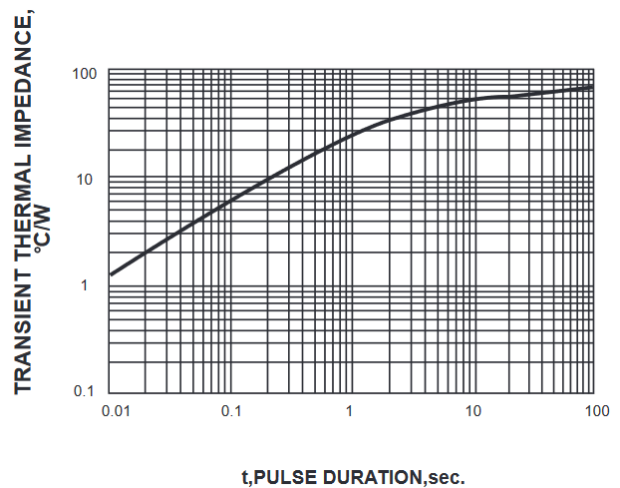
Typical reverse characteristics

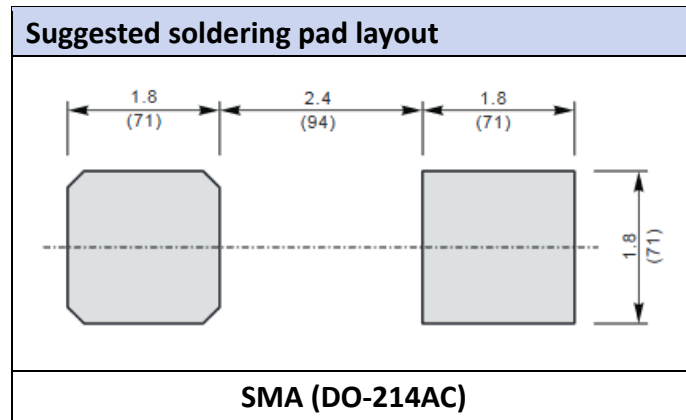


Instantaneous forward voltage



Typical transient thermal impedance





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
S1A ~ S1M	SMA (DO-214AC)	2000 pcs / reel	---

Disclaimer

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