

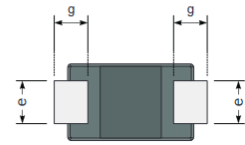
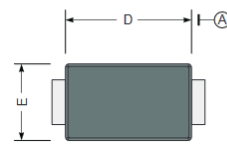
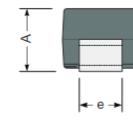
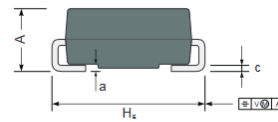
SMD Ultra Fast Recovery Rectifier Diode

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
- Fast reverse recovery time
- Solderable per MIL-STD-750, Method 2026
- Approx. weight: 0.07g / 0.002oz
- Plastic package has underwriters laboratory flammability classification 94 V-0

Case dimensions



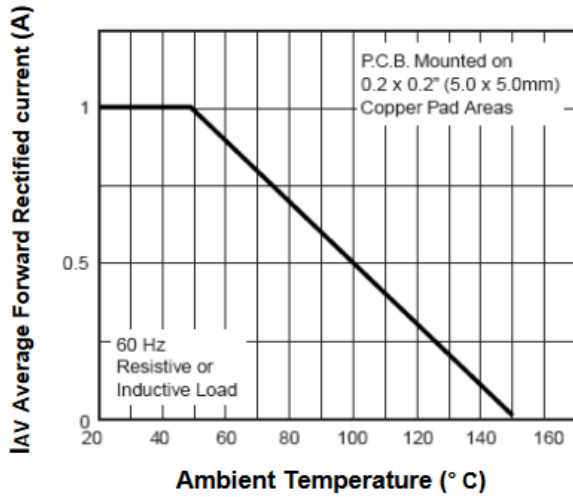
SMA (DO-214AC)

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

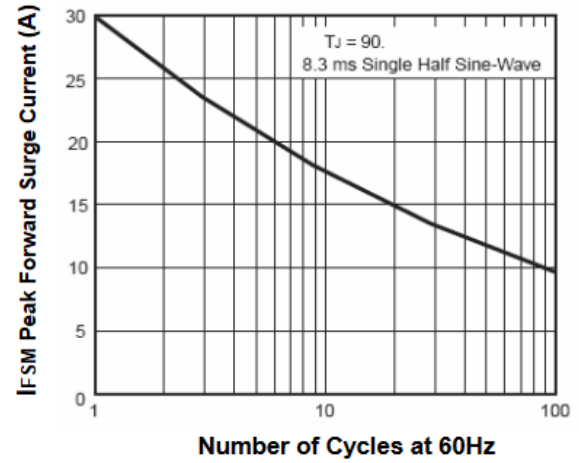
Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

Parameter		Symbol	Value						Unit	
			RS1A	RS1B	RS1D	RS1G	RS1J	RS1K		RS1M
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 0.375”(9.5mm) lead length		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	1.3						V	
Maximum DC reverse current at rated DC blocking voltage	T _a =25°C	I _R	5.0						μA	
	T _a =125°C		100							
Typical junction capacitance V _R =4V, f=1MHz		C _j	10				7		pF	
Maximum reverse recovery time I _F =0.5A, I _R =1.0A, I _{rr} =0.25A		T _{rr}	150				250	500		ns
Maximum Thermal Resistance		R _{θJL}	32						°C/W	
		R _{θJA}	105							
Operating junction and storage temperature range		T _j , T _{STG}	-55 ~ 150						°C	

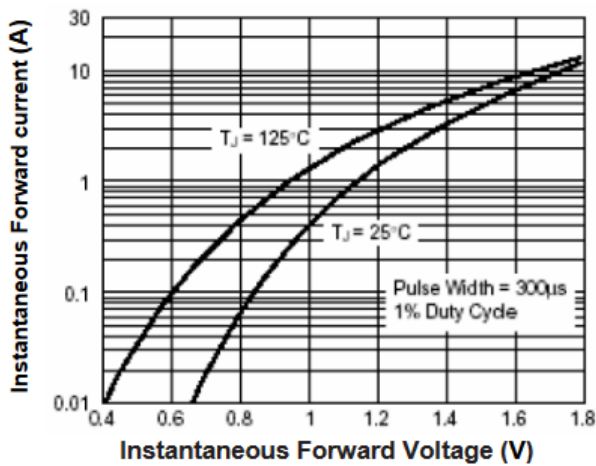
Forward current derating curve



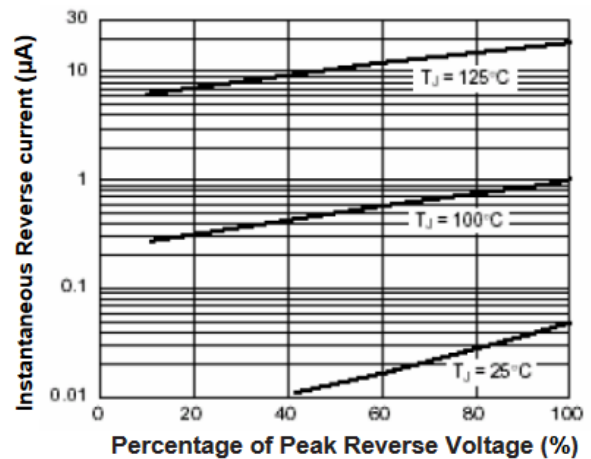
Maximum non-repetitive forward surge current



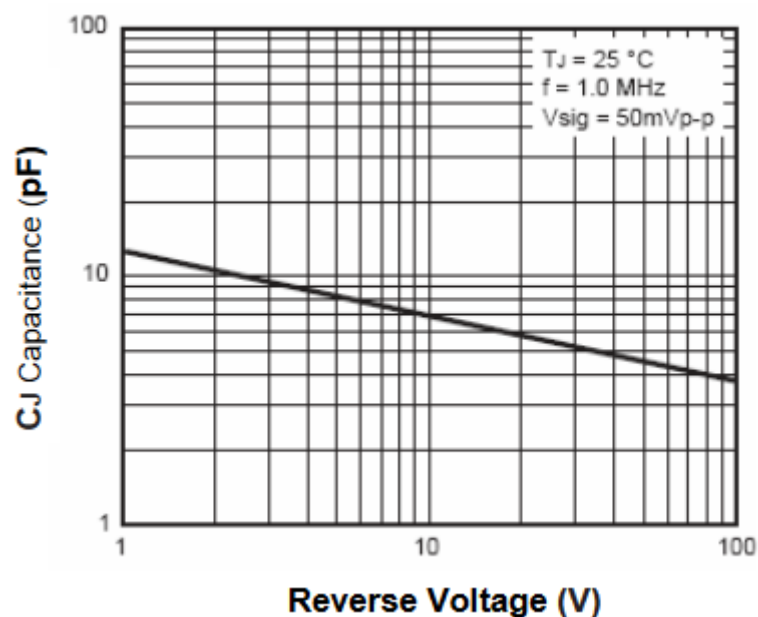
Typical instantaneous forward characteristics

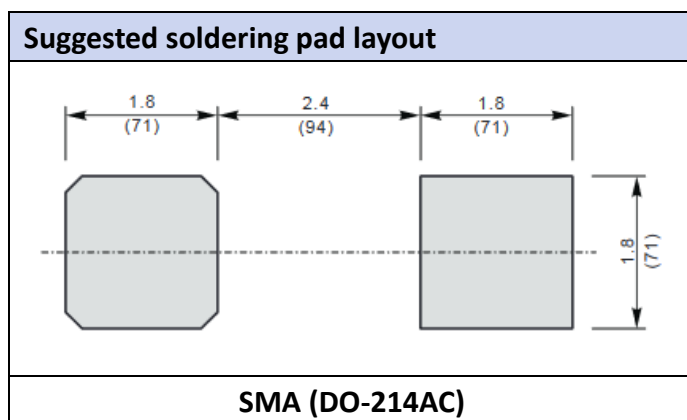


Typical reverse characteristics



Typical junction capacitance





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
RS1A ~ RS1M	SMA (DO-214AC)	2000 pcs / reel	---

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