

Surface Mount Rectifier

SOF1A2ND - SOF1A2NM

Features

- For surface mounted applications
- Ideal for automated placement
- Low forward voltage drop
- High forward surge current capability
- RoHS compliant with Halogen-free



Mechanical Data

- Case: SOD-123F molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202, Method 208
- Polarity: Color band denotes cathode end

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	SOF 1A2ND	SOF 1A2NG	SOF 1A2NJ	SOF 1A2NK	SOF 1A2NM	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	140	280	420	560	700	V
DC Blocking Voltage	V _{DC}	200	400	600	800	1000	V
Average Forward Output Current	I _{F_AV}	1.2					A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I _{FSM}	40					A

Thermal Characteristics

Parameter	Symbol	SOF 1A2ND	SOF 1A2NG	SOF 1A2NJ	SOF 1A2NK	SOF 1A2NM	Unit
Typical Thermal Resistance *1	R _{ΘJA}	85					°C/W
	R _{ΘJC}	23					
	R _{ΘJL}	15					
Operating Junction Temperature Range	T _J	-55 ~ +150					°C
Storage Temperature Range	T _{STG}	-55 ~ +150					°C

Note *1: Device mounted on p.c.b. with 10 mm x 20 mm x 0.1mm copper pad area

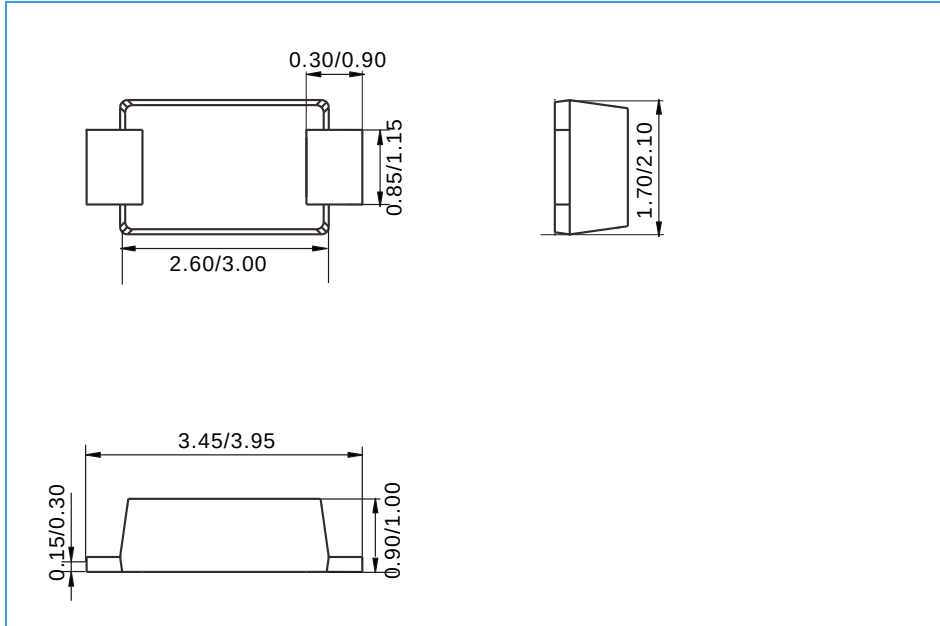
Surface Mount Rectifier**SOF1A2ND - SOF1A2NM****Electrical Characteristics** (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions		Typ.	Max.	Unit
Instantaneous Forward Voltage	V_F	$I_F = 1.2\text{A}$		-	1.1	V
Reverse Current	I_R	Rated V_R	@ $T_A = 25^\circ\text{C}$	-	5.0	μA
			@ $T_A = 125^\circ\text{C}$	-	50.0	

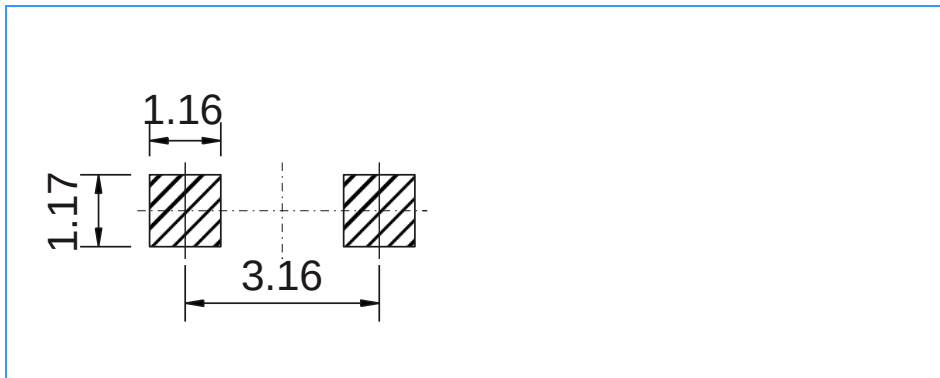
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Package Outline Dimensions (Unit: mm)



Mounting Pad Layout (Unit: mm)



Ordering Information

Part Number	Marking	Package	Shipping Quantity
SOF1A2ND	12ND	SOD-123F	10 kpcs / Tape & Reel
SOF1A2NG	12NG	SOD-123F	10 kpcs / Tape & Reel
SOF1A2NJ	12NJ	SOD-123F	10 kpcs / Tape & Reel
SOF1A2NK	12NK	SOD-123F	10 kpcs / Tape & Reel
SOF1A2NM	12NM	SOD-123F	10 kpcs / Tape & Reel