



### Features

- Low forward voltage drop
- High forward surge current capability
- Low profile SMD ideal for automated manufacturing
- Halogen-free

### Mechanical Data

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

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Values	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	200	V
RMS Reverse Voltage	V <sub>RMS</sub>	140	
DC Blocking Voltage	V <sub>DC</sub>	200	
Average Forward Output Current	I <sub>F_AV</sub>	1	A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I <sub>FSM</sub>	40	

### Thermal Characteristics

Parameter	Symbol	Values	Units
Typical Thermal Resistance *	R <sub>θJA</sub>	60	°C/W
	R <sub>θJC</sub>	23	
	R <sub>θJL</sub>	25	
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	

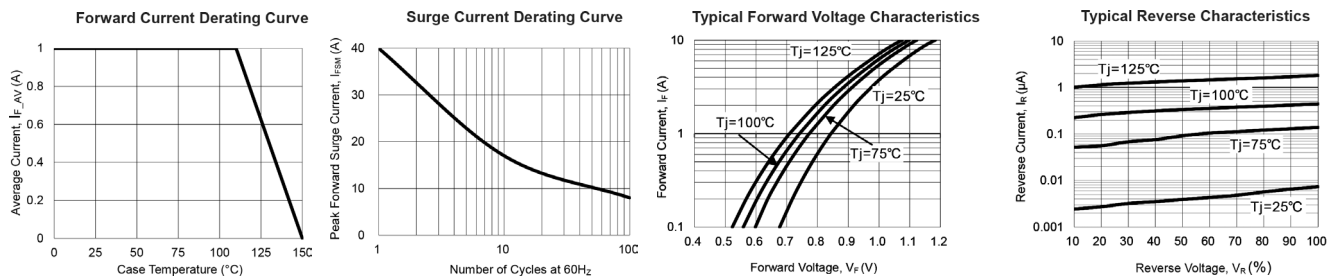
Note: \* Device mounted on PCB with 10mm × 20mm × 0.1mm copper pad area

### Electrical Characteristics (@T<sub>A</sub> = 25°C unless otherwise specified)

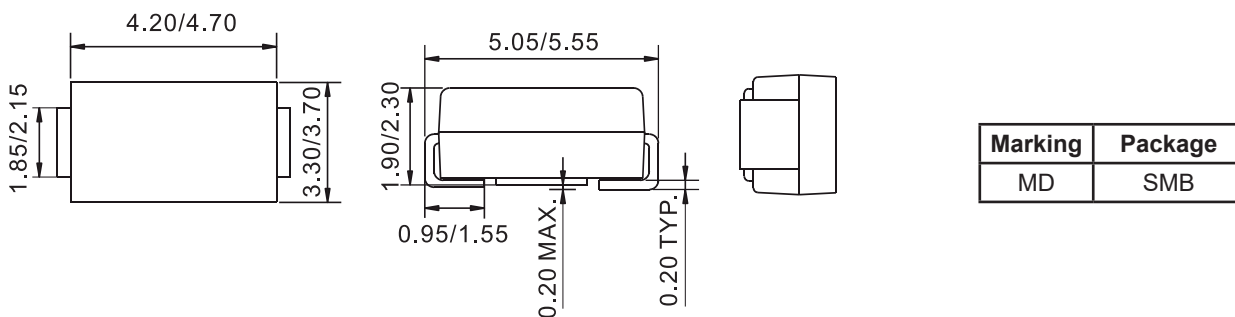
Parameter	Symbol	Values	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage		I <sub>R</sub> = 2μA	200	-	-	V
Instantaneous Forward Voltage		I <sub>F</sub> = 1A	-	-	0.88	
Reverse Current		Rated V <sub>R</sub>	-	-	5	μA
					200	
Reverse Recovery Time		I <sub>F</sub> = 0.5A, I <sub>RM</sub> = 1A, I <sub>R(REC)</sub> = 0.25A	-	-	35	ns

# Super-Fast Recovery Rectifier **multicomp**PRO

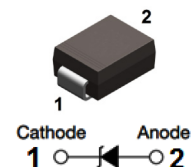
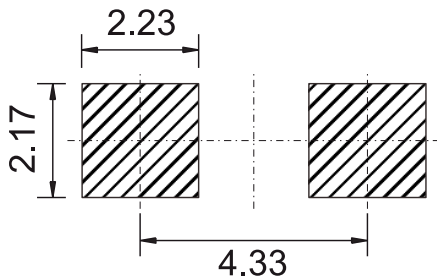
## Ratings and Characteristic Curves (@T<sub>A</sub>=25°C unless otherwise noted)



## Diagram



## Mounting Pad Layout



## Part Number Table

Description	Part Number
Super-Fast Recovery Rectifier, 200V, 1A, 875mV, 25ns, 40A	MURS120-13-F

Dimensions : Millimetres

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
sg.element14.com/b/multicomp-pro

**multicomp**PRO