# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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# **MUR260**

Preferred Device

# **SWITCHMODE**<sup>™</sup> **Power Rectifier**

These state-of-the-art devices are designed for use in switching power supplies, inverters and as free wheeling diodes.

# Features

- Ultrafast 50 Nanosecond Recovery Times
- 175°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- High Temperature Glass Passivated Junction
- These are Pb-Free Devices\*

# **Mechanical Characteristics:**

- Case: Epoxy, Molded
- Weight: 0.4 Gram (Approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- Shipped in Plastic Bags; 1,000 per Bag

Rating

• Available Tape and Reel; 5,000 per Reel, by Adding a "RL" Suffix to the Part Number

Symbol

Unit

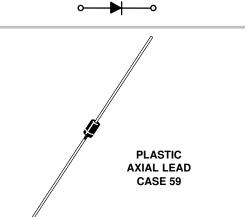
Value



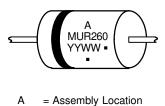
# **ON Semiconductor®**

http://onsemi.com

# **ULTRAFAST RECTIFIER** 2.0 AMPERES, 600 VOLTS



# MARKING DIAGRAM



v = Year

WW = Work Week

# = Pb-Free Package

(Note: Microdot may be in either location)

## **ORDERING INFORMATION**

Device	Package	Shipping <sup>†</sup>
MUR260	Axial Lead**	1000 Units/Bag
MUR260G	Axial Lead**	1000 Units/Bag
MUR260RL	Axial Lead**	5000/Tape & Reel
MUR260RLG	Axial Lead**	5000/Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

\*\*This package is inherently Pb-Free.

Preferred devices are recommended choices for future use and best overall value.

# Peak Repetitive Reverse Voltage

**MAXIMUM RATINGS** 

Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	600 -	V
Average Rectified Forward Current (Note 1) (Square Wave Mounting Method #3 Per Note 3)	I <sub>F(AV)</sub>	2.0 @ T <sub>A</sub> = 60°C	А
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	I <sub>FSM</sub>	35	A
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>stg</sub>	−65 to +175	°C

## THERMAL CHARACTERISTICS

Characteristics	Symbol	Value	Unit
Maximum Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	See Note 3	°C/W

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

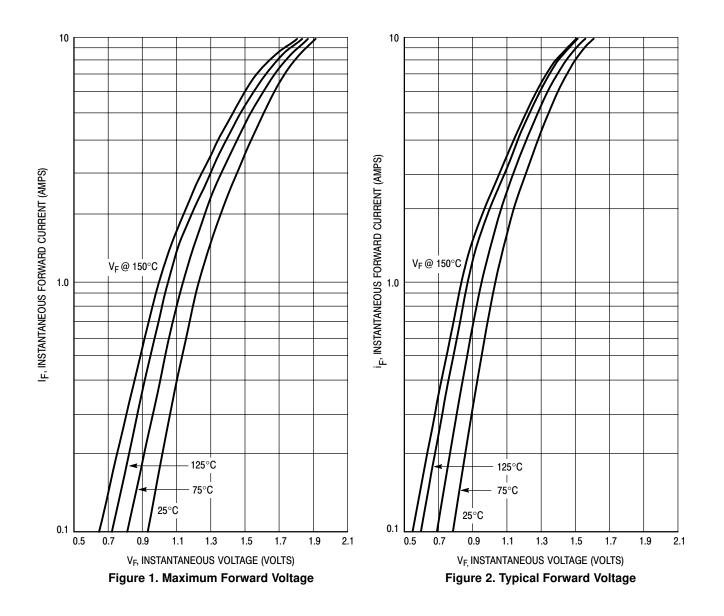
1. Pulse Test: Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

\*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

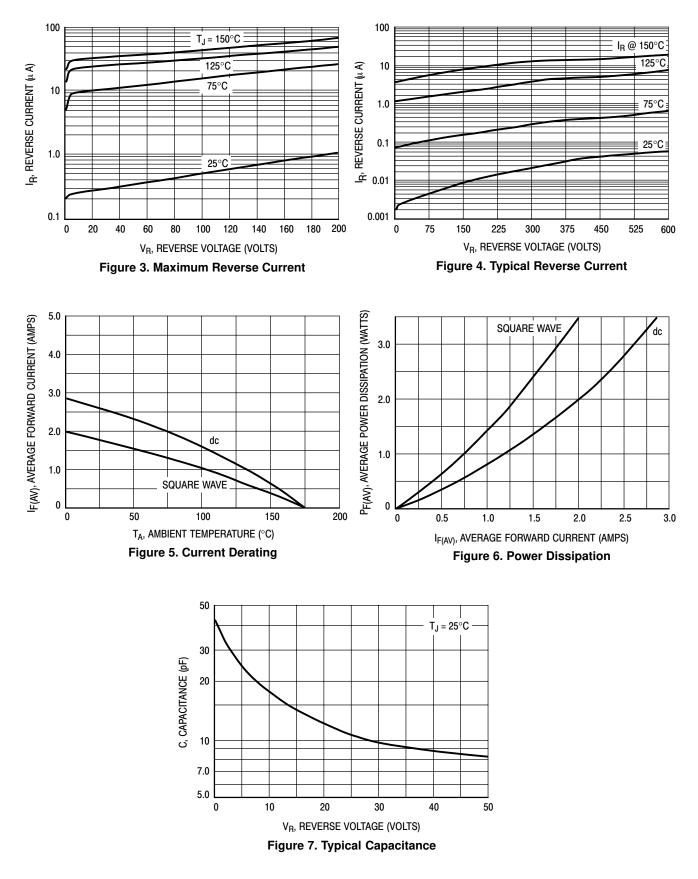
# **ELECTRICAL CHARACTERISTICS**

Characteristics	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage (Note 2) ( $I_F = 2.0 \text{ Amp}, T_J = 150^{\circ}\text{C}$ ) ( $I_F = 2.0 \text{ Amp}, T_J = 25^{\circ}\text{C}$ )	VF	1.15 1.35	V
Maximum Instantaneous Reverse Current (Note 2) (Rated dc Voltage, $T_J = 150^{\circ}$ C) (Rated dc Voltage, $T_J = 25^{\circ}$ C)	i <sub>R</sub>	150 5.0	μΑ
$\begin{array}{l} \mbox{Maximum Reverse Recovery Time} \\ (I_F = 1.0 \mbox{ Amp, di/dt} = 50 \mbox{ Amp/} \mu s) \\ (I_F = 0.5 \mbox{ Amp, } I_R = 1.0 \mbox{ Amp, } I_{REC} = 0.25 \mbox{ A}) \end{array}$	t <sub>rr</sub>	75 50	ns
Maximum Forward Recovery Time ( $I_F = 1.0 \text{ A}$ , di/dt = 100 A/µs, $I_{REC}$ to 1.0 V)	t <sub>fr</sub>	50	ns

2. Pulse Test: Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.



# **MUR260**



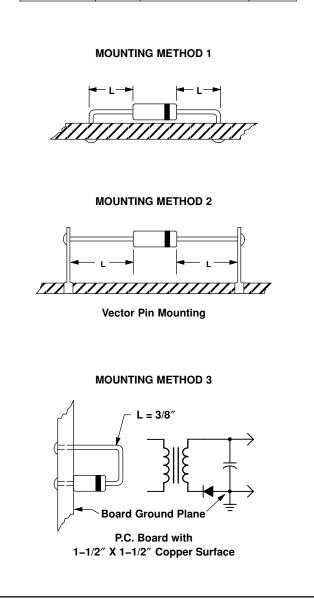
# **MUR260**

# NOTE 3 — AMBIENT MOUNTING DATA

Data shown for thermal resistance, junction–to–ambient  $(R_{\theta JA})$  for the mountings shown is to be used as typical guideline values for preliminary engineering or in case the tie point temperature cannot be measured.

# TYPICAL VALUES FOR $\textbf{R}_{\theta \textbf{JA}}$ IN STILL AIR

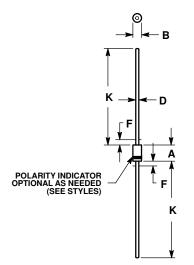
	Mounting		Lead Length, L			
	Metho	1/8	1/4	1/2	Units	
Ī	1		52	65	72	°C/W
	2	$R_{\theta JA}$	67	80	87	°C/W
	3			50		°C/W



### PACKAGE DIMENSIONS

**AXIAL LEAD** CASE 59-10

ISSUE U



NOTES:

- 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982. CONTROLLING DIMENSION: INCH
- 2 3.
- ALL RULES AND NOTES ASSOCIATED WITH JEDEC DO-41 OUTLINE SHALL APPLY POLARITY DENOTED BY CATHODE BAND. LEAD DIAMETER NOT CONTROLLED WITHIN F 4.
- 5 DIMENSION.

		INCHES		INCHES MILLIMETER		ETERS
DI	М	MIN	MAX	MIN	MAX	
A		0.161	0.205	4.10	5.20	
В	;	0.079	0.106	2.00	2.70	
D	)	0.028	0.034	0.71	0.86	
F			0.050		1.27	
K	[	1.000		25.40		

STYLE 1: PIN 1. CATHODE (POLARITY BAND)

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