

MUR640AX

Technical Data Data Sheet N0143 Rev. - Green Products

MUR640AX ULTRAFAST RECTIFIERS

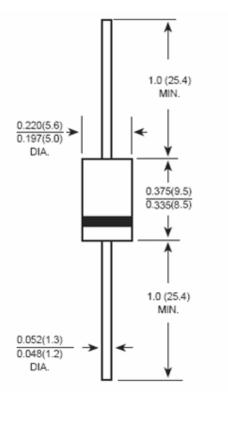
Applications:

- Switching Power Supply
- Power Switching Circuits
- General Purpose

Features:

- Low forward voltage drop
- High current capability
- High reliability
- High Surge Current Capability
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions: In Inches / mm



DO-201AD



MUR640AX

Technical Data Data Sheet N0143 Rev. -

Green Products

Marking Diagram:



Where XXXXX is YYWWL

MUR	= Device Type
6	= Forward Current (6A)
40	= Reverse Voltage (400V)
AX	= Configuration
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions : Molding resin Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping	
	DO-201AD	1250200 / 1020	
MUR640AX	(Pb-Free)	1250pcs / tape	

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



Technical Data Data Sheet N0143 Rev. -

Green Products

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR640AX	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	400	V
Average Rectified Output Current	@T _A = 105°C	lo	6.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	150	A
Forward Voltage (per element)	@I _F = 6.0A	V _{FM}	1.3	V
Peak Reverse Current At Rated DC Blocking Voltage	@T _A = 25°C @T _A = 100°C	I _{RM}	5.0 100	μA
Maximum Reverse Recovery Time (N	Trr	50	ns	
Typical Junction Capacitance (Note 2)	Cj	60	pF	
Max. Voltage Rate of Change	dv/dt	10,000	V/µs	
Typical Thermal Resistance Junction	$R_{ extsf{ heta}JA}$	25	K/W	
Storage Temperature Range	T _{STG}	-55 to +150	°C	
Max. Junction Temperature	TJ	-55 to +150	°C	
Approximate Weight	wt	1.02	g	
Case Style		DO-201AD		

Note: 1. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

3. Mount on Cu-Pad Size 16mm×16mm on P.C.B.



Technical Data Data Sheet N0143 Rev. -

MUR640AX

Green Products

DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.

3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

. 4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.