

# MUR420 MUR440 MUR460

### **ULTRAFAST RECTIFIER**

# VOLTAGE RANGE 200 to 600 Volts CURRENT 4.0 Amperes

### **FEATURES**

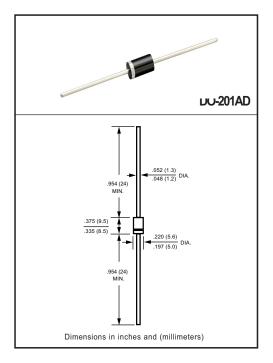
- \* High reliability
- \* Low leakage
- \* Low forward voltage
- \* High current capability
- \* Ultrafast switching speed
- \* High surge capability
- \* Good for switching mode circuit
- \* P/N suffix V means AEC-Q101 qualified, e.g:MUR420V
- \* P/N suffix V means Halogen-free

### **MECHANICAL DATA**

- \* Case: Molded plastic
- $^{\star}$  Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 1.2 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	MUR420 MUR440		MUR460	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	140	280	420	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	400	600	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> =55°C	Io	4.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	125	110		
Current Squarad Time	I <sup>2</sup> t	64.8	5	A <sup>2</sup> /Sec	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150			

### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERIST	SYMBOL	MUR420	MUR440	MUR460	UNITS	
Maximum Instantaneous Forward V	V <sub>F</sub>	1.05	1.45		Volts	
Maximum DC Reverse Current	@T <sub>A</sub> = 25°C	la la	5	10		uAmps
at Rated DC Blocking Voltage	@T <sub>A</sub> = 150°C	IR	2	į.	;	mAmps
Maximum Reverse Recovery Time	trr	25	5	0	nSec	

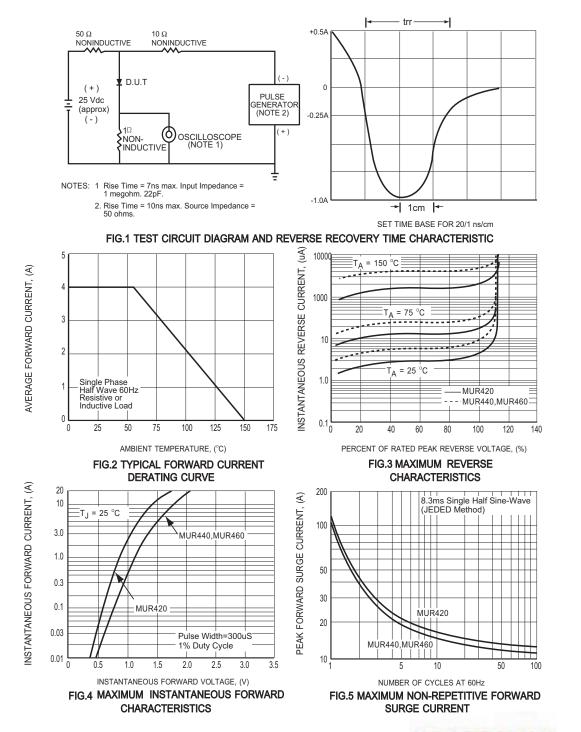
NOTES : 1. Test Conditions:  $\rm I_F$  = 0.5A,  $\rm I_R$  = -1.0A,  $\rm I_{RR}$  = -0.25A

2. " ROHS complaint"

3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

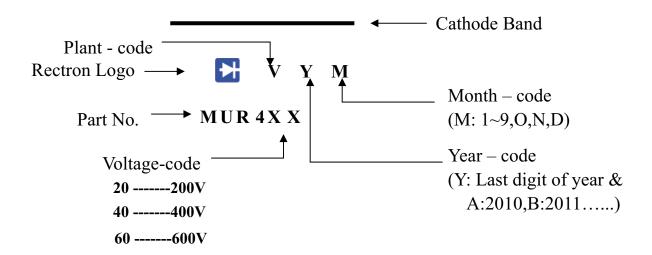
2020-04 REV:D

# RATING AND CHARACTERISTICS CURVES (MUR420 THRU MUR460)





# Marking on the body



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

# BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE CARTON SIZE (mm) (mm)		EA PER CARTON	GROSS WEIGHT(Kg)
DO-201	-B	500	300*73*40	347*320*271	12,000	15.9

# REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-201	-T	1,200	1,200	5.0	52	330	355*350*335	4,800	9.10

# AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-201	-F	600	9.5	52	255*73*100	400*268*225	6,000	9.9



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