



## MUR440 THRU MUR460

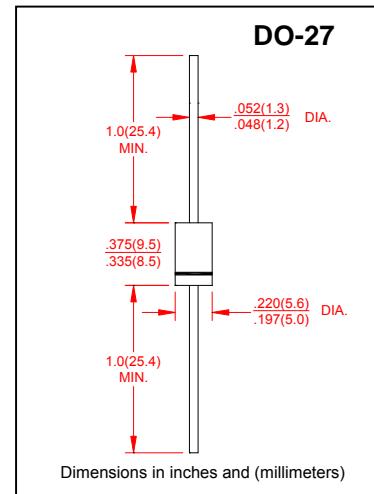
VOLTAGE RANGE  
400 to 600 Volts  
CURRENT  
4.0 Ampere

## FEATURES

- Low forward voltage drop
- High current capability
- Low power loss, high efficiency
- High reliability
- High surge current capacity
- High temperature soldering guaranteed

## MECHANICAL DATA

- Case: Mold plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.042ounce, 1.19 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	MUR440	MUR460	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	600	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	Volts
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	4.0		Amps
Peak Forward Surge Current, 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>		70	Amps
Maximum Instantaneous Forward Voltage at 4.0A(NOTE1)	V <sub>F</sub>	1.28		Volts
Maximum DC Reverse Current at rated DC blocking Voltage at	I <sub>R</sub>	10		µA
	T <sub>A</sub> = 25°C	250		
	T <sub>A</sub> = 150°C			
Maximum Reverse Recovery Time (I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>RR</sub> =0.25A)	t <sub>rr</sub>	50		nS
Typical Junction Capacitance (NOTE2)	C <sub>J</sub>	65		pF
Typical Thermal Resistance (NOTE3)	R <sub>θJA</sub>	28		°C/W
Operating Junction Temperature Range	T <sub>J</sub>	(-55 to +150)		°C
Storage Temperature Range	T <sub>STG</sub>	(-55 to +150)		°C

NOTE1.Pulse test: t<sub>p</sub>=300µS, duty cycle≤2%.

NOTE2.Measured at 1.0MHz and applied reverse voltage of 4.0V

NOTE3.Thermal Resistance from Junction to Ambient with 1/2 " Lead length on P.C.Board with 1.5."×1.5 "copper pads.



SHENZHEN FAITH TECHNOLOGY CO.,LTD

4.0A ULTRA FAST RECTIFIERS

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## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

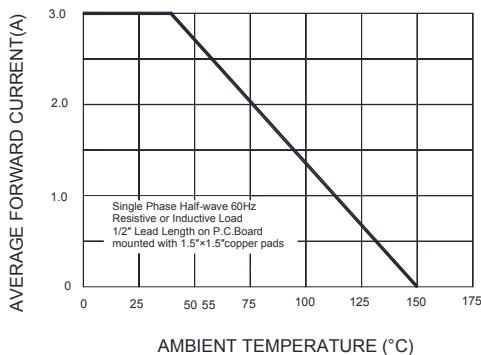


FIG.4-TYPICAL REVERSE CHARACTERISTICS

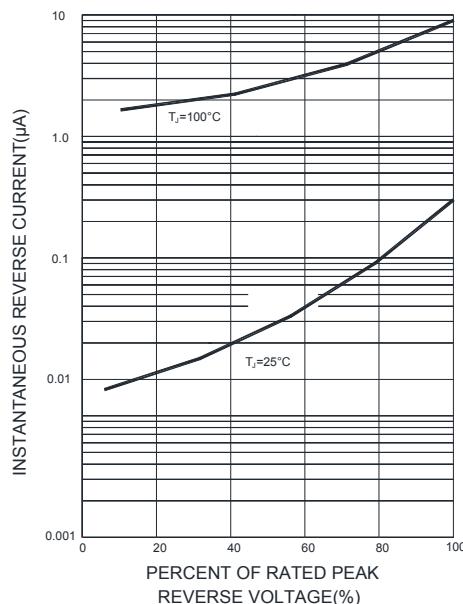


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

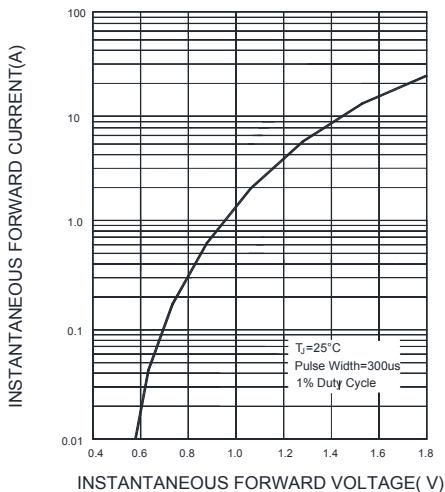


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

