

MUR405G thru MUR4100G

ULTRA FAST RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 4.0 Amperes

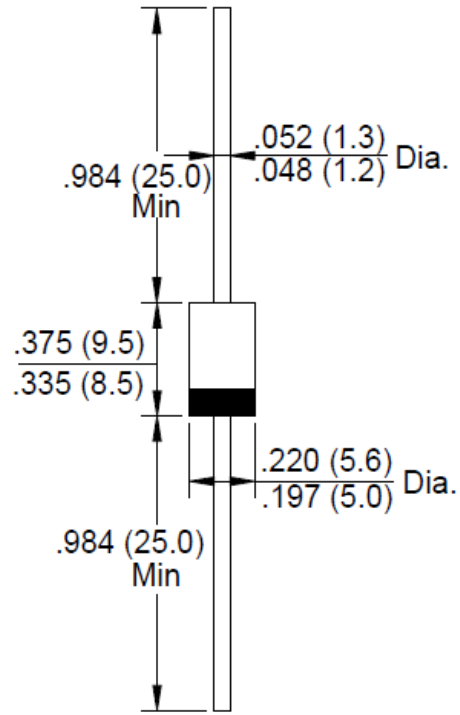
FEATURES

- Ultra fast switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder dip 260 °C, 40s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

FEATURES

- Case: JEDEC DO-201AE molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.04 grams

DO-27



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 current derate by 20%.

CHARACTERISTICS	SYMBOL	MUR 405G	MUR 410G	MUR 415G	MUR 420G	MUR 440G	MUR 460G	MUR 480G	MUR 4100G	UNIT
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	280	420	550	700	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at T _A =55°C	I _(AV)	4.0								A
Peak forward surge current 8.3ms single half sinewave superimposed on rated load (JEDEC Method)	I _{FSM}	150								A
Maximum instantaneous forward voltage at 4.0A	V _F	1.0		1.28			1.85			V
Maximum DC reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	10 150								μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	45			50		75			nS
Typical thermal resistance (NOTE 3)	R _{θJA}	20								°C/W
Typical junction capacitance (NOTE 2)	C _J	60								pF
Operating junction capacitance	T _J	-65 to + 150								°C
Storage temperature range	T _{STG}	-65 to + 150								°C

Notes: 1. Reverse recovery condition I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

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FIG. 1 – FORWARD CURRENT DERATING

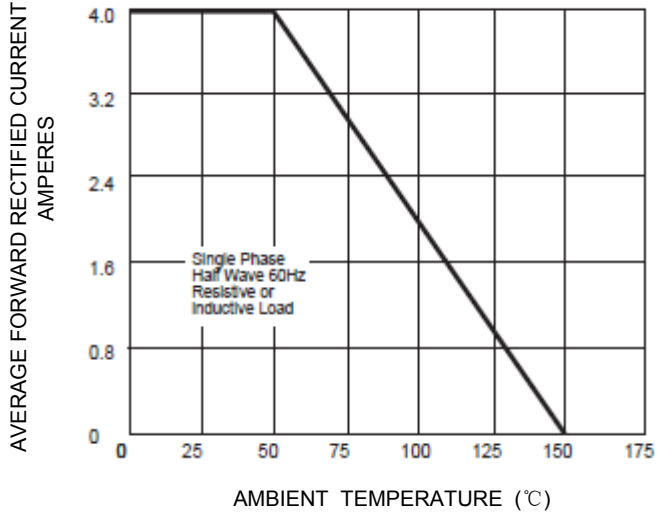


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

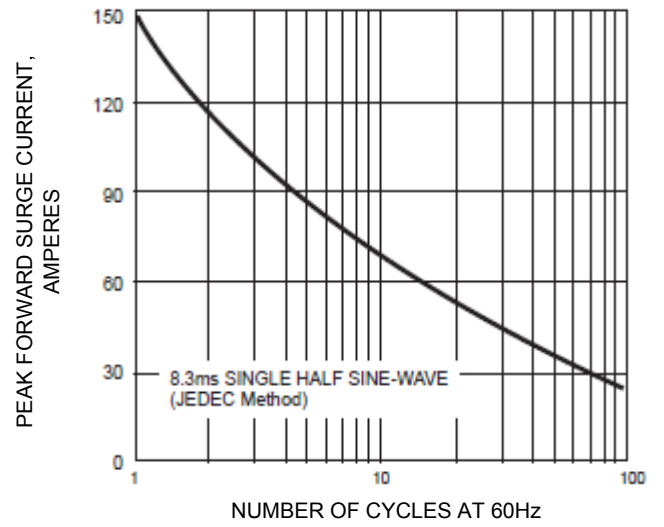


FIG. 4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

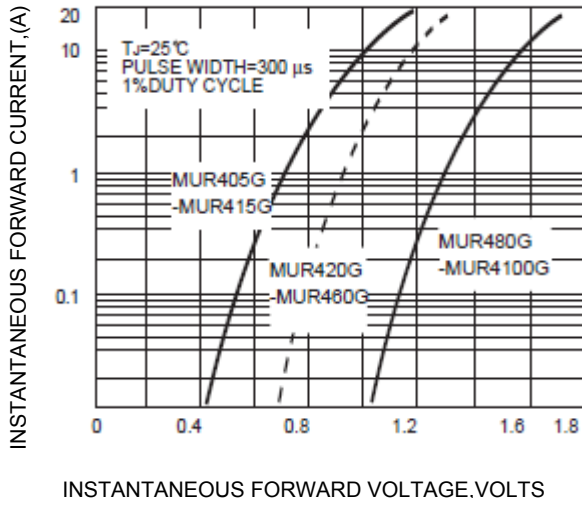


FIG. 5 – TYPICAL REVERSE CHARACTERISTICS

