

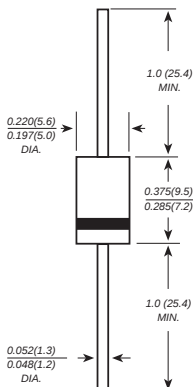


MUR405 THRU MUR4100

ULTRA FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 4.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 ounce, 1.10 grams

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%.

YXW Catalog Number	SYMBOLS	MUR405	MUR410	MUR415	MUR420	MUR440	MUR460	MUR480	MUR4100	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	105	140	280	420	550	700	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	150	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length	I _(AV)	4.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150								Amps
Maximum instantaneous forward voltage at 4.0A	V _F	1.0				1.25		1.7		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =150°C	I _R	2.0 50.0				5.0 150.0				µA
Maximum reverse recovery time (NOTE 1)	t _{rr}	25				50				ns
Typical thermal resistance (NOTE 2)	R _{θJA}	27.0				50.0				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175								°C

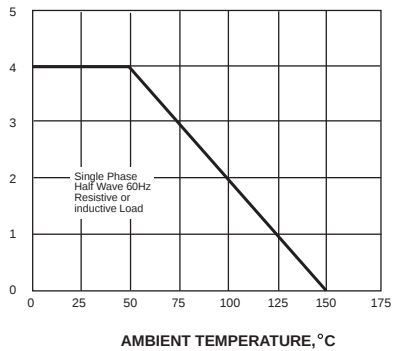
Note: 1. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

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

RATINGS AND CHARACTERISTIC CURVES MUR405 THRU MUR4100

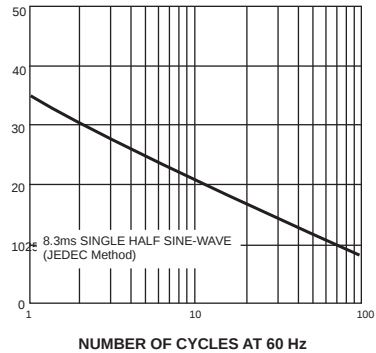
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



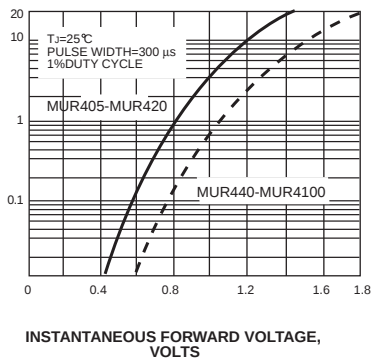
PEAK FORWARD SURGE CURRENT,
AMPERES

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



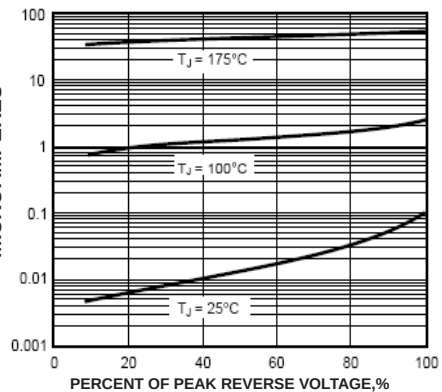
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



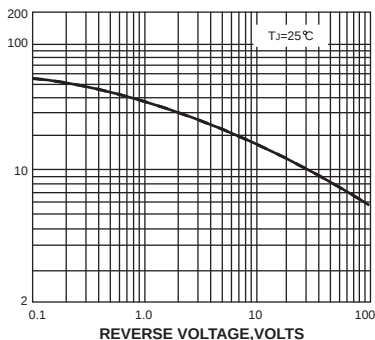
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



The cruve graph is for reference only, can't be the basis for judgment()!