

MUR405 THRU MUR4100



FEATURES

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



DO-201AD

PRIMARY CHARACTERISTICS

IF(AV)	4.0 A
VRRM	50 V to 1000 V
IFSM	150 A
Trr	45 ns, 60ns, 75 ns
VF	1.0V, 1.35V, 1.85V
IR	10 µA
TJ max.	150 °C

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body

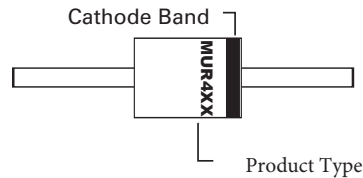
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 1.10 grams

Part Marking System



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%.

PARAMETER	SYMBOL	MUR405	MUR410	MUR415	MUR420	MUR440	MUR460	MUR480	MUR4100	UNIT
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	560	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 at TA=55℃	I _(AV)	4.0								Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150.0								Amps
Maximum instantaneous forward voltage at 4.0A	V _F	1.0			1.35			1.85		Volts
Maximum DC reverse current TA=25 ℃ at rated DC blocking voltage TA=100 ℃	I _R	10.0 150.0								μA
Maximum reverse recovery time (NOTE 1)	T _{rr}	45				60		75		nS
Typical junction capacitance (NOTE 2)	C _J	60								pF
Typical thermal resistance (NOTE 3)	R _{θJA}	20.0								℃/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150								℃

Note: 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

MUR405 THRU MUR4100

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

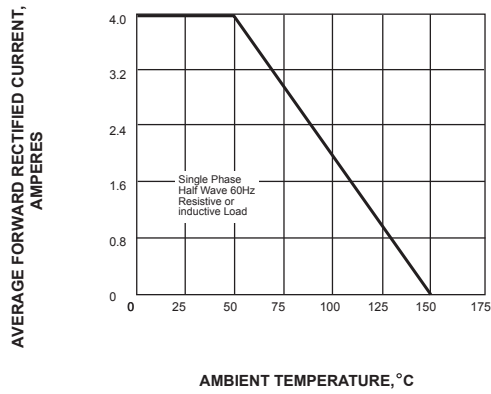


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

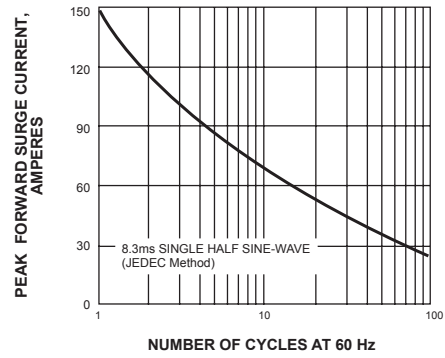


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

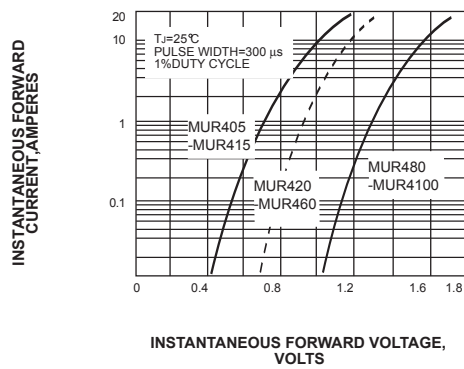
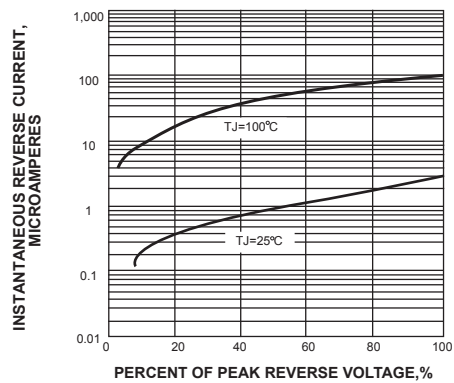
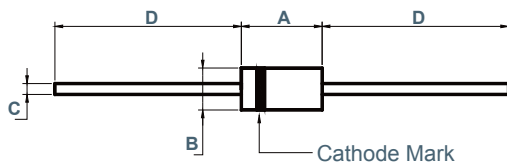


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Dimensions

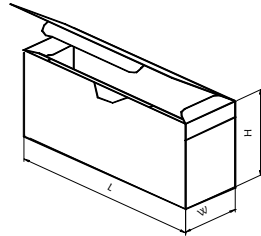
DO-201AD



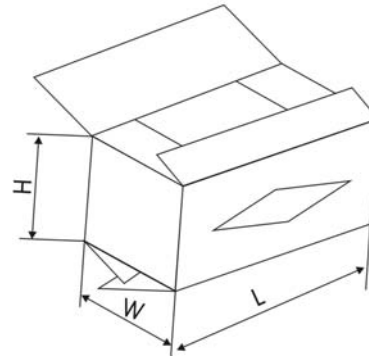
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.335	0.374	8.50	9.50	
B	0.197	0.220	5.00	5.60	Φ
C	0.048	0.052	1.20	1.30	Φ
D	1.000	—	25.4	—	

Package Specifications

1. SKETCH MAP OF PACKAGE



INNER BOX



CARTON

2.AMMUNITION PACKAGING (T/B)

PACKAGING CODE	CASE TYPE	INNER BOX				CARTON		APPROX WEIGHT (Kg)
		(K)	COMPONENT SPACE (mm)	TAPE SPACE (mm)	SIZE (mm ³)	(K)	SIZE (mm ³)	
HA	A-405	5	5	52	257×80×145	50	430×280×310	14
HB		2.5	5	52	255×75×75	50	400×270×340	20
HC	DO-41	5	5	52	257×80×145	50	430×280×310	20
HD		2.5	5	52	255×75×75	50	400×270×340	21
HE	DO-41(G)	2.5	5	52	265×75×75	100	440×270×340	21
HF	DO-15	3	5	52	258×80×145	30	430×280×310	14
HG	DO-15L/B	2	5	52	255×80×145	20	430×280×310	14
HH	DO-34(G)	5	5	52	255×75×75	100	440×270×340	18
HI	DO-35(G)	5	5	52	255×75×75	100	440×270×340	20
HJ	R-1	5	5	52	255×80×145	50	430×280×310	14
HK	R-3	2	5	52	255×80×120	20	430×280×260	17
HL	R-6	0.25	10	52	255×75×75	5	400×270×340	12
HR	DO-27	1	10	52	258×80×145	10	430×280×310	14
HM	A-405F	5	5	36	255×55×140	100	530×310×310	22
HN	A-405	2.5	5	26	255×55×75	70	400×270×340	14
HP	DO-41	2.5	5	26	255×55×75	50	400×270×340	14