

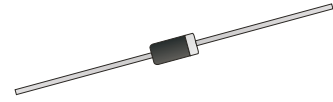
MUR420-HF Thru. MUR440-HF

Voltage: 200 to 400 V

Current: 4.0 A

RoHS Device

Halogen Free

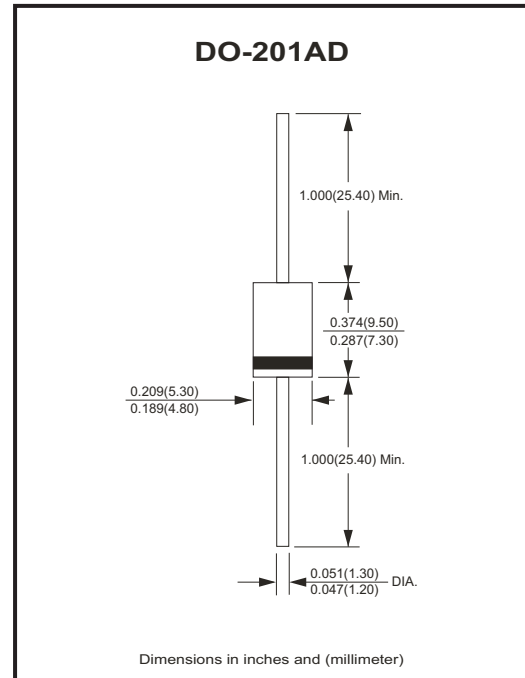


Features

- Fast switching speed for high efficiency.
- Low reverse leakage current.
- Low forward drop down voltage.
- High surge current capability & current capability.
- Fast switching speed for high efficiency.
- Glass passivated chip junction.
- High reliability.

Mechanical data

- Case: Molded plastic, DO-201AD
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.1 grams(approx.).



Circuit Diagram



Maximum Rating and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MUR420-HF	MUR440-HF	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	V
Maximum RMS voltage	V_{RMS}	140	280	V
Maximum DC blocking voltage	V_{DC}	200	400	V
Maximum average forward rectified current @ $T_L=55^\circ\text{C}$, See figure 1	$I_{(AV)}$	4.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150		A
Maximum instantaneous forward voltage	$I_F = 3.0\text{A}$	1.0	1.25	V
	$I_F = 4.0\text{A}$	1.1	1.28	
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	5.0	10	μA
	$T_A=125^\circ\text{C}$	100	200	
Maximum reverse recovery time (Note 1)	T_{rr}	35	50	nS
Typical junction capacitance (Note 2)	C_J	60		pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	50		$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55~+150		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55~+150		$^\circ\text{C}$

Notes:

1. Reverse recovery test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1.0MHz and applied reverse voltage of 4.0V
3. Thermal resistance from junction to ambient, both leads are attached to heatsink 20x20x1t(mm) copper plate at lead length 5mm

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

RATING AND CHARACTERISTIC CURVES (MUR420-HF Thru. MUR440-HF)

Fig.1 - Forward Current Derating Curve

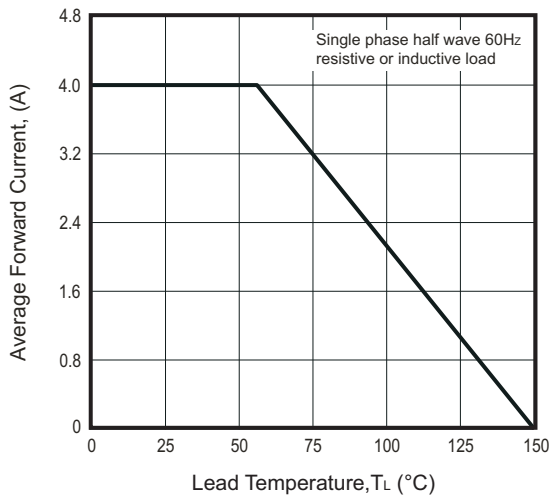


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

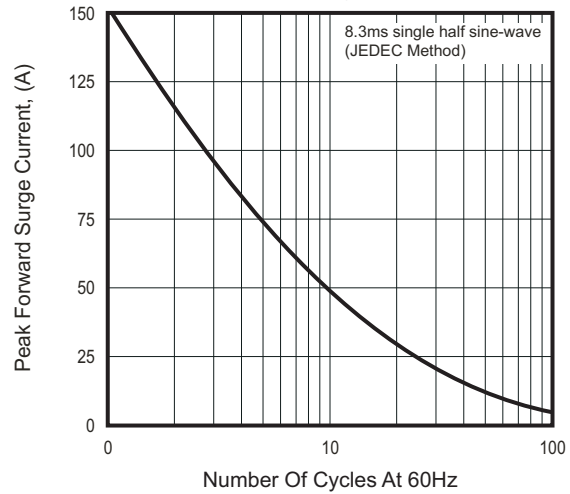


Fig.3A - Typical Instantaneous Forward Characteristics

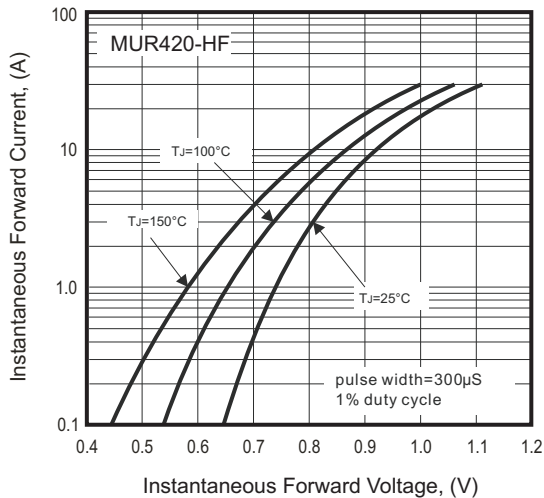


Fig.3B - Typical Instantaneous Forward Characteristics

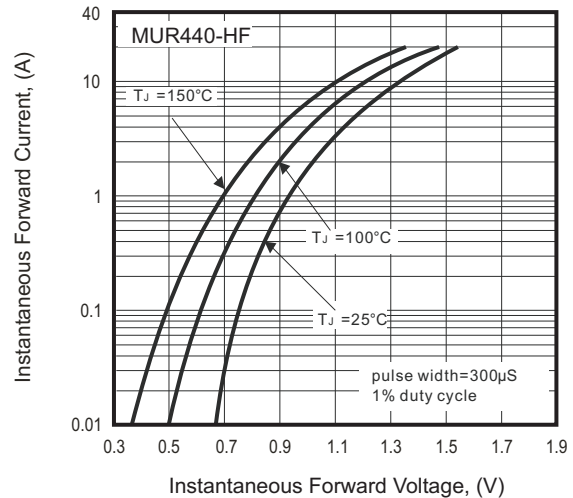


Fig.4 - Typical Instantaneous Reverse Characteristics

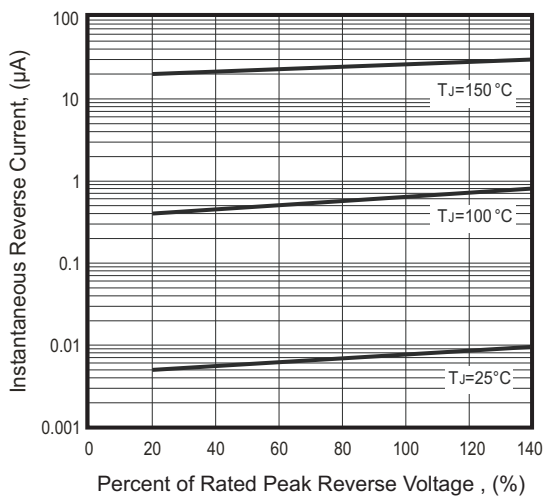
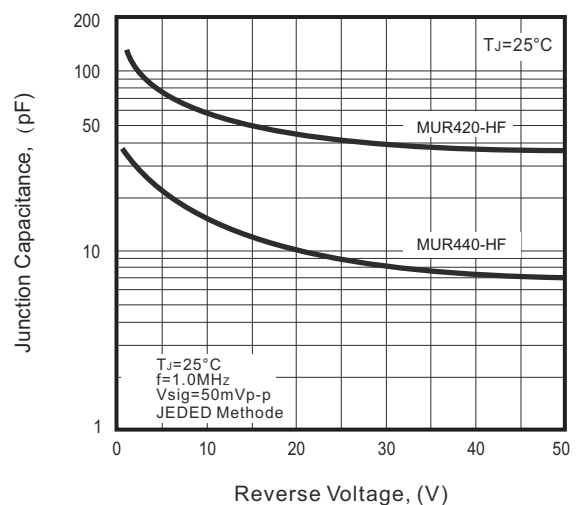
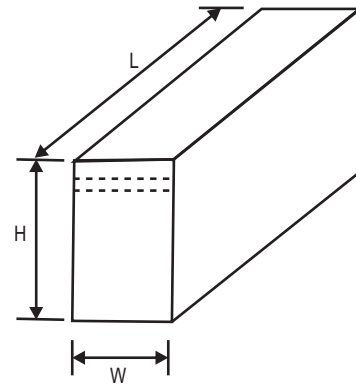
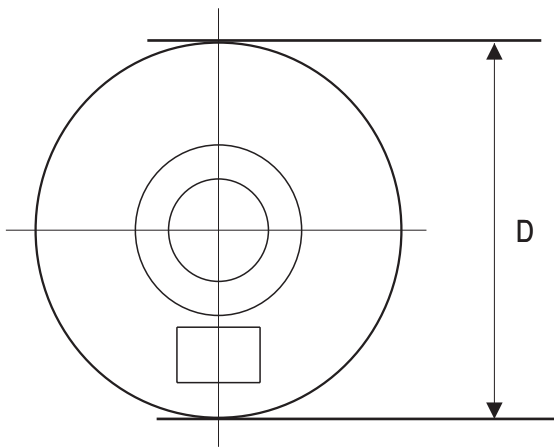
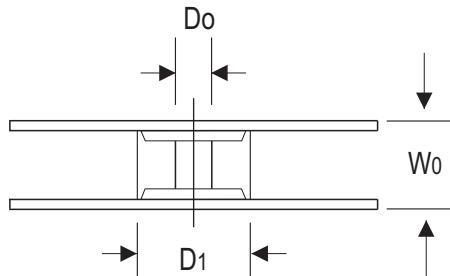
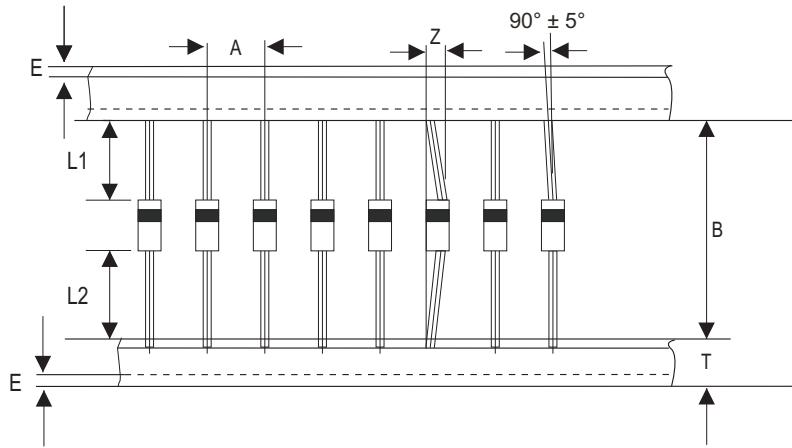


Fig.5 - Typical Junction Capacitance



Taping Specification For Axial Lead Diodes



DO-201	SYMBOL	A	B	Z	T	E	L1	L2
	(mm)	10.00 ± 0.50	52.40 ± 0.50	1.60 (max)	6.00 ± 0.40	0.80 (max)	1.00 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	2.063 ± 0.020	0.063 (max)	0.236 ± 0.016	0.031 (max)	0.039 (max)	0.039 (max)

DO-201	SYMBOL	D1	D0	D	W0	L	W	H
	(mm)	82.20 ± 0.30	16.60 ± 0.40	330.00	77.00 ± 1.00	260.00	80.00	145.00
	(inch)	3.236 ± 0.012	0.654 ± 0.016	13.000	3.031 ± 0.039	10.236	3.150	5.709

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Marking Code

Part Number	Marking code
MUR420-HF	MUR420H
MUR440-HF	MUR440H



MRUXXX = Product type marking code
H = Halogen Free

Standard Packaging

Case Type	AMMO PACK	
	Q'TY / BOX (pcs)	Q'TY / CARTON (pcs)
DO-201AD	1,200	1200x10