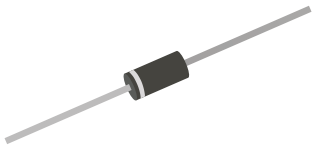
Ultra Fast Recovery Rectifier

MUR440-G Thru. MUR460-G

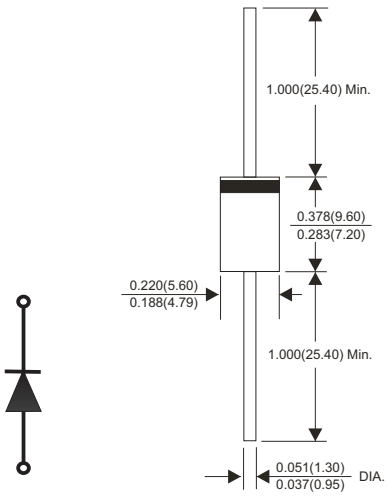
Voltage: 400 to 600 V
Current: 4.0 A
RoHS Device



Features

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

DO-201AD



Dimensions in inches and (millimeter)

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
- Mounting position: Any
- Weight: 1.1 grams(approx.).

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%.

Parameter		Symbol	MUR440-G	MUR460-G	Unit
Maximum recurrent peak reverse voltage		V_{RRM}	400	600	V
Maximum peak reverse voltage		V_{RWM}	280	420	V
Maximum DC blocking voltage		V_{DC}	400	600	V
Maximum average forward rectified current T_L=55°C		$I_{(AV)}$	4		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 @ 4A		V_F	1.28		V
Maximum DC reverse current at rated DC blocking voltage	T_J=25°C	I_R	10		μA
	T_J=125°C		200		
Maximum reverse recovery time at I_F=0.5A , I_R=1.0A , Irr=0.25A		Trr	50		nS
Typical junction capacitance (Note 1)		C_J	60		pF
Typical thermal resistance (Note 2)		$R_{\Theta JA}$	50		°C/W
Operating junction temperature		Tj	-55~+150		°C
Storage temperature range		T_{STG}	-55~+150		°C

NOTES:
1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.
2. Thermal resistance from junction to ambient, both leads are attached to heatsink 20x 20*1t(mm) copper plate at lead length 5mm.

RATING AND CHARACTERISTIC CURVES (MUR440-G Thru. MUR460-G)

Fig.1 - Forward Current Derating Curve

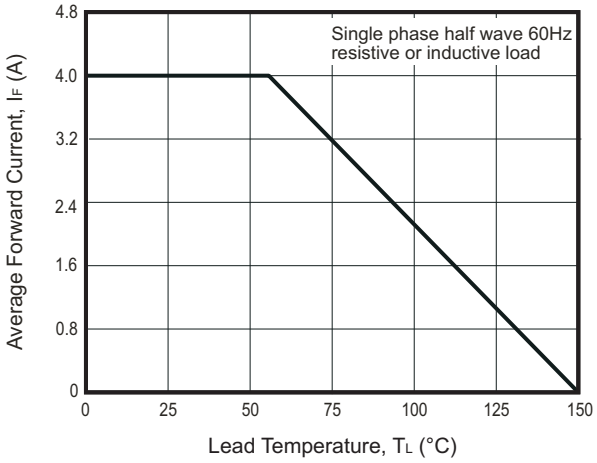


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

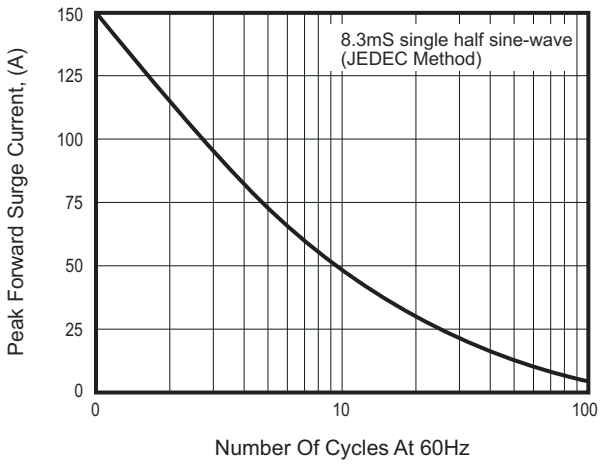


Fig.3 - Typical Instantaneous Forward Characteristics

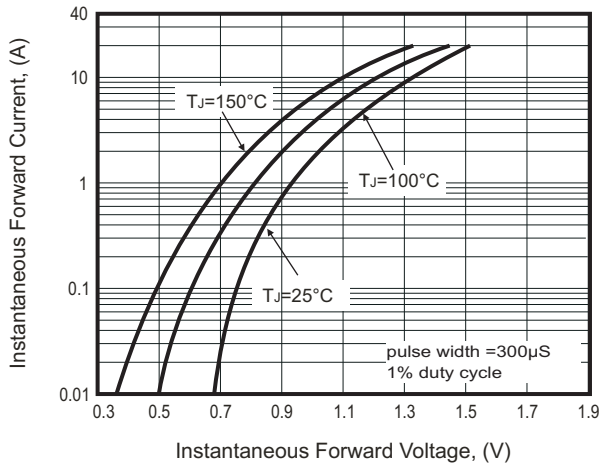


Fig.4 - Typical Instantaneous Reverse Characteristics

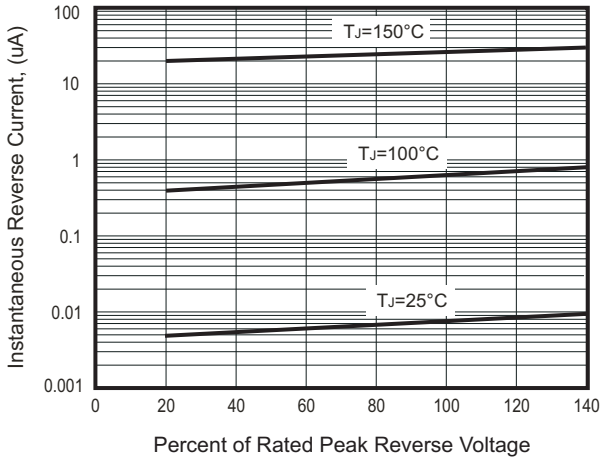
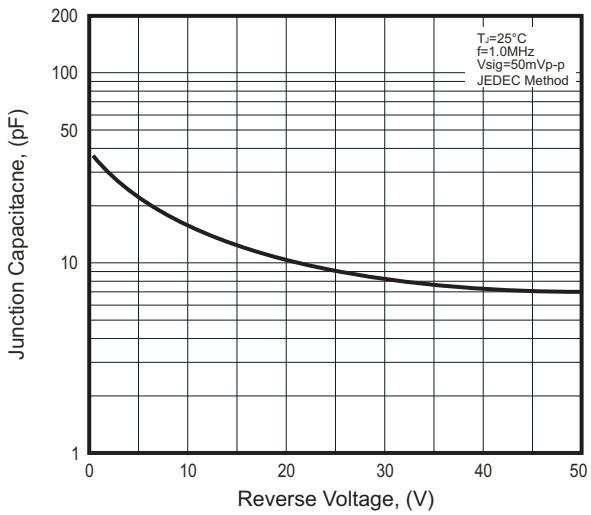
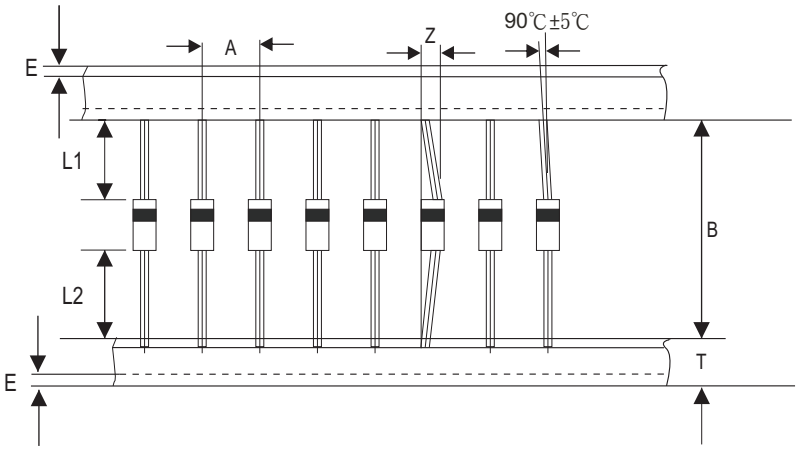
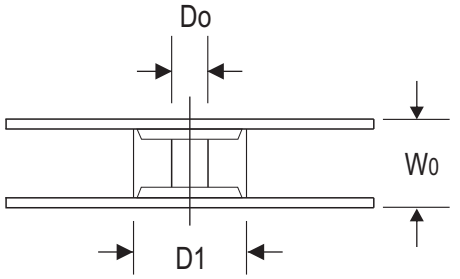


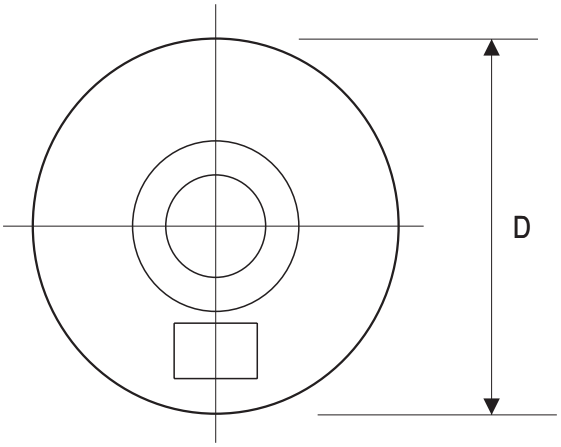
Fig.5 - Typical Junction Capacitance



Taping Specification For Axial Lead Diodes







	SYMBOL	A	B	Z	T	E	|L1-L2|
DO-201AD	(mm)	10.00 ± 0.50	52.40 ± 1.50	1.60(max)	6.00 ± 0.40	3.00(max)	1.00(max)
	(inch)	0.394 ± 0.020	2.063 ± 0.059	0.063(max)	0.236 ± 0.016	0.118(max)	0.039(max)

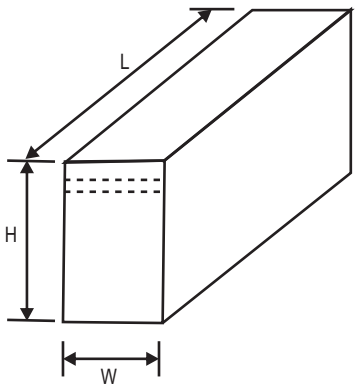
	SYMBOL	D	D_0	D_1	W_0
DO-201AD	(mm)	330.00 ± 2.00	16.60 ± 0.40	82.20 ± 0.30	77.00 ± 1.00
	(inch)	12.992 ± 0.079	0.654 ± 0.016	3.236 ± 0.012	3.031 ± 0.039

Reel Packing

	SYMBOL	Box Length	Box Width	Box heitht
DO-201AD	(mm)	350 ± 5.00	350 ± 5.00	350 ± 5.00
	(inch)	13.780 ± 0.197	13.780 ± 0.197	13.780 ± 0.197

Ammo Packing

	SYMBOL	Box Length	Box Width	Box heitht
DO-201AD	(mm)	288 ± 5.00	148 ± 5.00	80 ± 5.00
	(inch)	11.339 ± 0.197	5.827 ± 0.197	3.150 ± 0.197



Marking Code

Part Number	Marking code	Packaging
MUR440T-G	MUR440	REEL
MUR440A-G	MUR440	AMMO
MUR460T-G	MUR460	REEL
MUR460A-G	MUR460	AMMO

Note:
1) Suffix code after part number to specify packaging item .

Packaging	Code
REEL PACK	T
AMMO PACK	A
BULK PACK	B
TUBE PACK	P

XXX = Product type marking code

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-201AD	1,200	13

Case Type	AMMO PACK
	BOX (pcs)
DO-201AD	1,200