

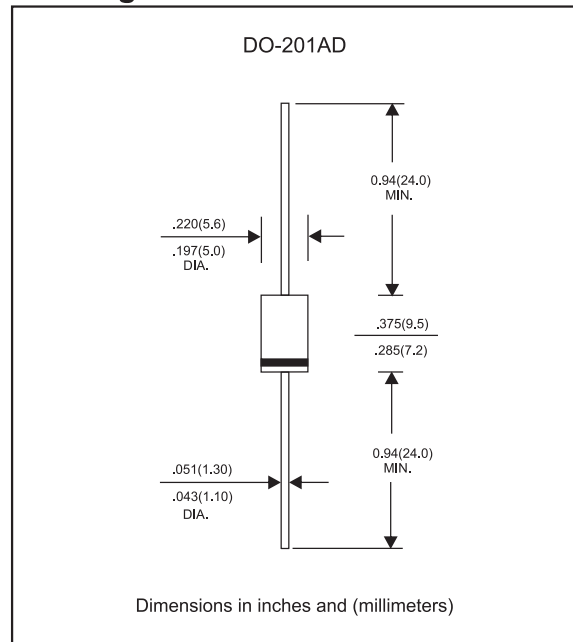
Features

- Super fast switching time for Hi-efficiency.
- Low Forward Voltage Drop.
- High Surge Current Capabiltiy.
- Low Power Loss.
- Glass passivated chip junction.
- Ultra-Fast Recovery Time.
- Lead-free parts meet RoHS requirments.
- Suffix "-H" indicates Halogen free parts, ex. MUR460-H.

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, DO-201AD
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting Position : Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_o			4.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			100	A
Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM} T_J = 100^{\circ}\text{C}$				100	
Typical Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		75		pF
Storage temperature		T_{STG}	-65		+150	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	t_{tr}^{*5} (ns)	Operating temperature $T_J, (^{\circ}\text{C})$
MUR420	200	140	200	0.92	25	
MUR440	400	280	400	1.25	50	
MUR460	600	420	600			

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=4.0\text{A}$

*5 Maximum Reverse recovery time, note 1

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

Rating and characteristic curves (MUR420 THRU MUR460)

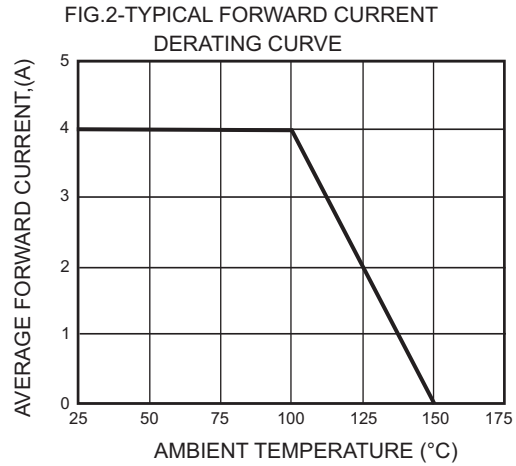
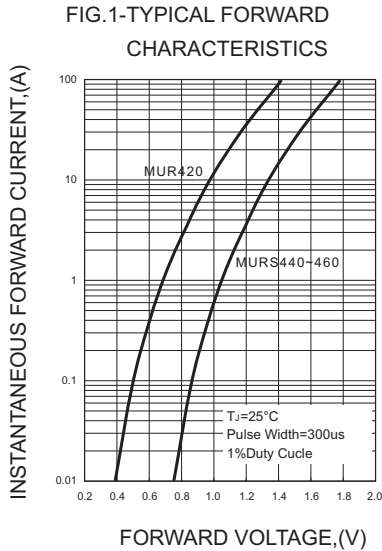
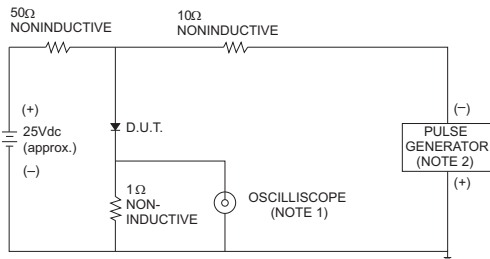


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

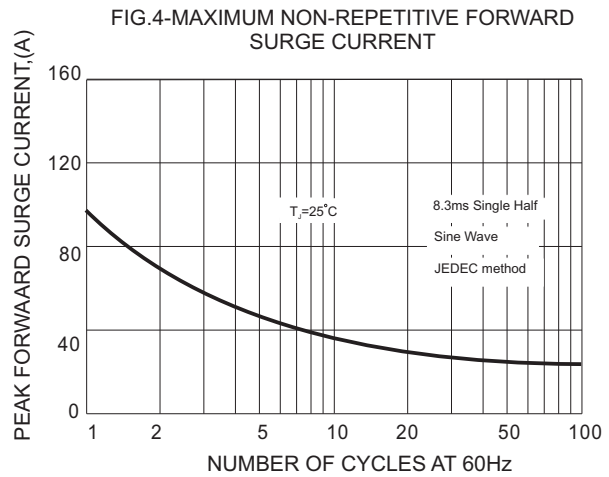
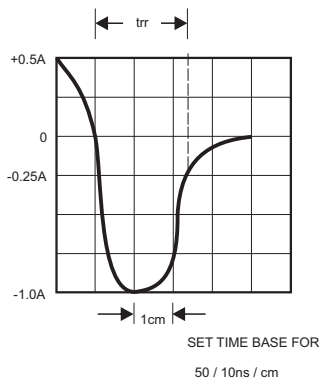
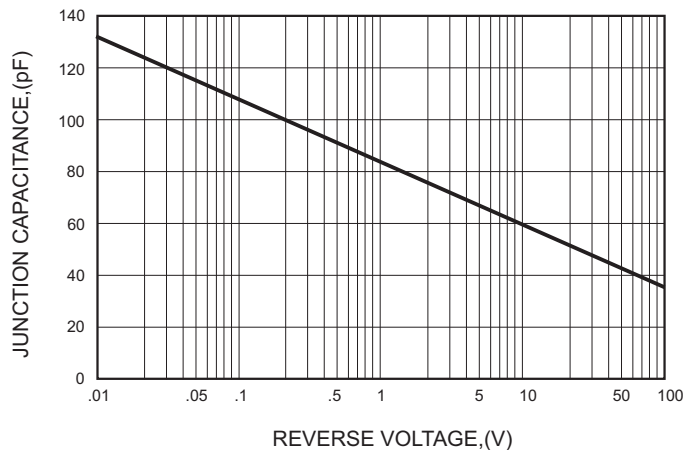




FIG.5-TYPICAL JUNCTION CAPACITANCE



Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
MUR420	MUR420
MUR440	MUR440
MUR460	MUR460

Taping specifications for AXIAL devices

