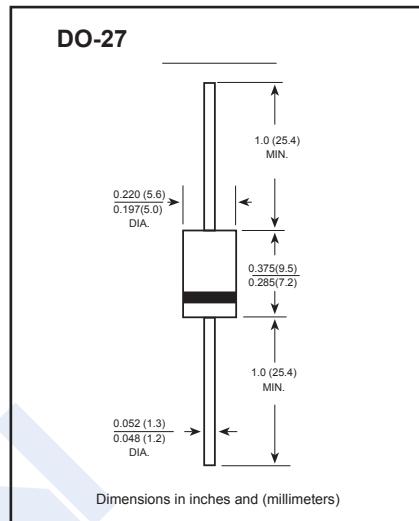


## Ultra Fast Recovery Diodes

### MUR405 ~ MUR4100

**■ Features**

- High Surge Capability
- Low Leakage
- Low Forward Voltage Drop
- Ultra Fast Switching Speed For High Efficiency



**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	MUR 405	MUR 410	MUR 415	MUR 420	MUR 440	MUR 460	MUR 480	MUR 4100	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	400	600	800	1000	V
RMS Voltage	V <sub>RMS</sub>	35	70	105	140	280	420	560	700	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	400	600	800	1000	
Averaged Forward Current TA=55°C	I <sub>FAV</sub>									A
Peak Forward Surge Current	I <sub>FSM</sub>									
Typical thermal resistance	R <sub>θJC</sub>									°C/W
Junction Temperature	T <sub>j</sub>									°C
Storage Temperature	T <sub>stg</sub>									
								-55 to 150		

**■ Electrical Characteristics Ta = 25°C**

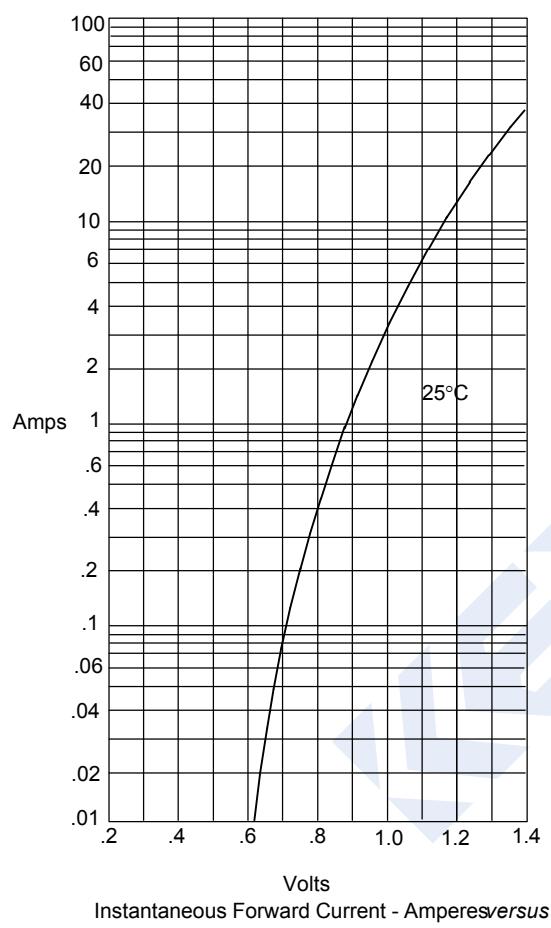
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit	
Forward voltage	MUR405-415	VF	IF=4A, Ta = 25°C			1	V	
	MUR420-460					1.35		
	MUR480-4100					1.85		
Reverse voltage leakage current	IR	Ta = 25°C				10	uA	
		Ta = 100°C				50		
Reverse Recovery Time	MUR405-415	trr	If=0.5A, Ir=1A, Irr=0.25A			45	ns	
	MUR420-460					60		
	MUR480-4100					75		
Junction Capacitance	MUR405-460	C <sub>J</sub>	VR=4V, f=1MHz			80	pF	
	MUR480-4100					50		

## Ultra Fast Recovery Diodes

### MUR405 ~ MUR4100

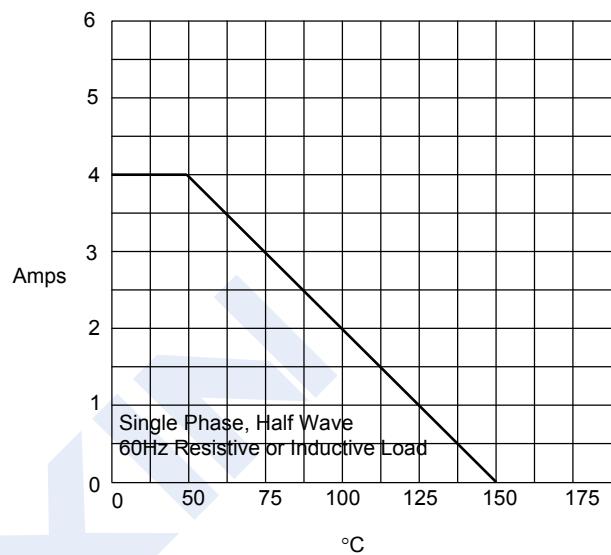
#### ■ Typical Characteristics

Figure 1  
Typical Forward Characteristics



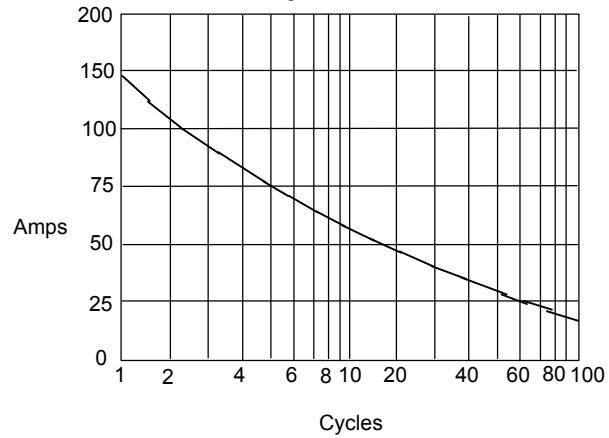
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles