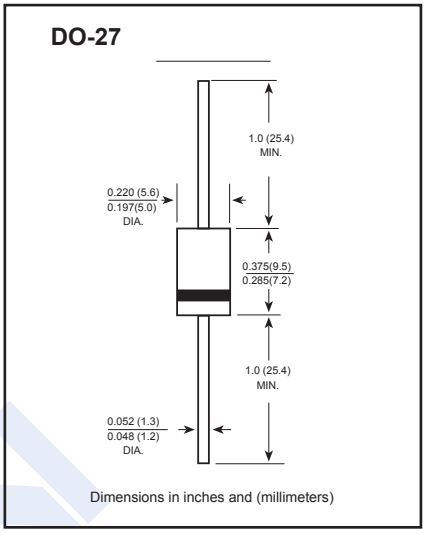
Ultra Fast Recovery Diodes

MUR405 ~ MUR4100



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	MUR 405	MUR 410	MUR 415	MUR 420	MUR 440	MUR 460	MUR 480	MUR 4100	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	105	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	400	600	800	1000	
Averaged Forward Current.T_A=55℃	I_{FAV}	4								A
Peak Forward Surge Current	I_{FSM}	150								
Typical thermal resistance	$R_{\theta JC}$	20								℃/W
Junction Temperature	Tj	150								℃
Storage Temperature	Tstg	-55 to 150								

■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	MUR405-415	VF	IF=4A,Ta = 25℃			1	V
	MUR420-460					1.35	
	MUR480-4100					1.85	
Reverse voltage leakage current		IR	Ta = 25℃			10	uA
			Ta = 100℃			50	
Reverse Recovery Time	MUR405-415	trr	I_F=0.5A, I_R=1A, Irr=0.25A			45	ns
	MUR420-460					60	
	MUR480-4100					75	
Junction Capacitance	MUR405-460	CJ	V_R=4V, f=1MHz			80	pF
	MUR480-4100					50	

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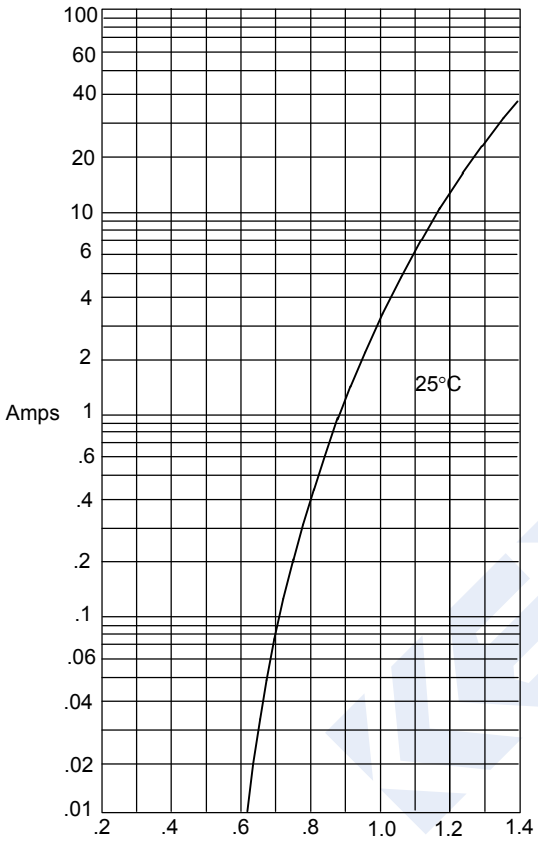
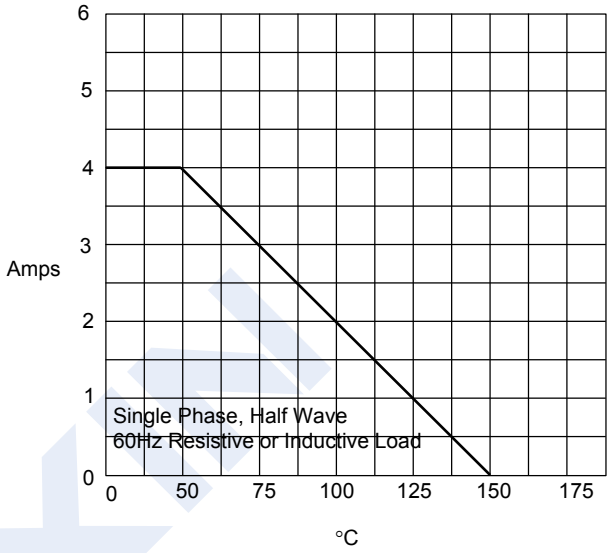
■ Typical Characterisitics

Figure 1
Typical Forward Characteristics



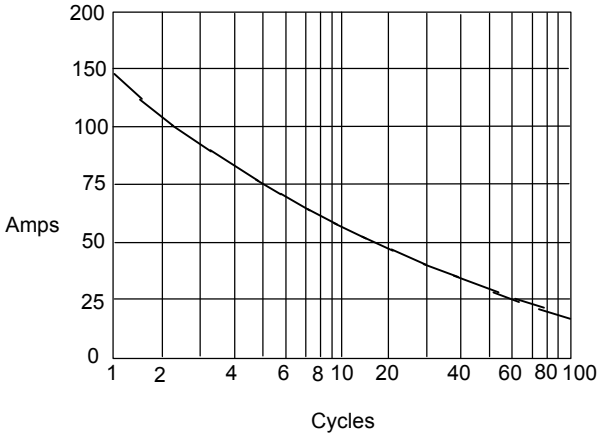
Instantaneous Forward Current - Amperes*versus*
Instantaneous Forward Voltage - Volts

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