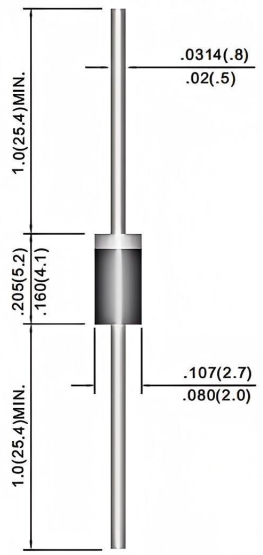
Super Fast Recovery Rectifier

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	1.0	A

DO-41



Features

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

Maximum Ratings

- Operating Temperature: -50℃ to +150℃
- Storage Temperature: -50℃ to +150℃

Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR105	50V	35V	50V
MUR110	100V	70V	100V
MUR115	150V	105V	150V
MUR120	200V	140V	200V
MUR140	400V	280V	400V
MUR160	600V	420V	600V
MUR180	800V	550V	800V
MUR1100	1000V	700V	1000V

Electrical Characteristics(at T_J=25℃ unless otherwise specified)

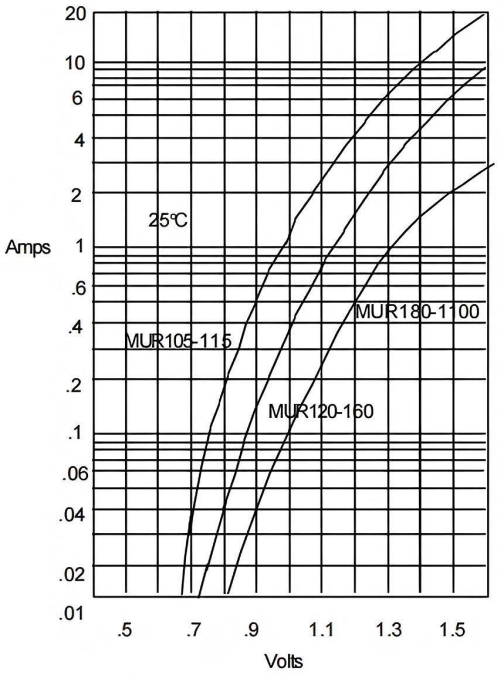
Parameter	Symbol	Value	Conditions
Average Forward Current	$I_{F(AV)}$	1.0A	T_A=55℃
Peak Forward Surge Current	I_{FSM}	35A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MUR105-115 MUR120-160 MUR180-1100	V_F	 0.975V 1.35V 1.75V	 I_{FM}=1.0A; T_A=25℃*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5uA 150uA	T_A=25℃ T_A=150℃

Maximum Reverse Recovery Time MUR105-120 MUR140-160 MUR180-1100	T_{rr}	 45ns 60ns 75ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, V_R=4.0V

*Pulse test: Pulse width 300m sec, Duty cycle 1%

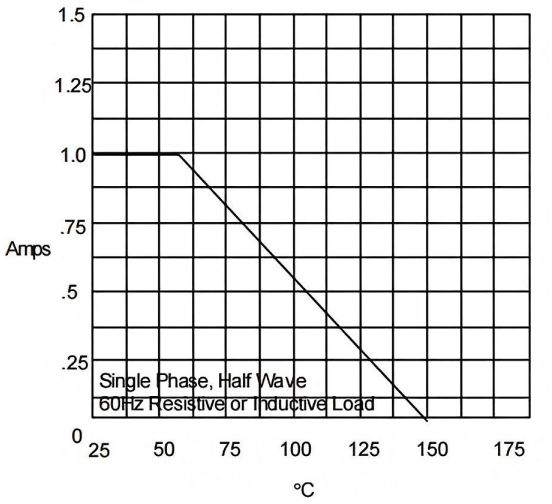
Typical characteristics

Fig 1.Typical Forward Characteristics



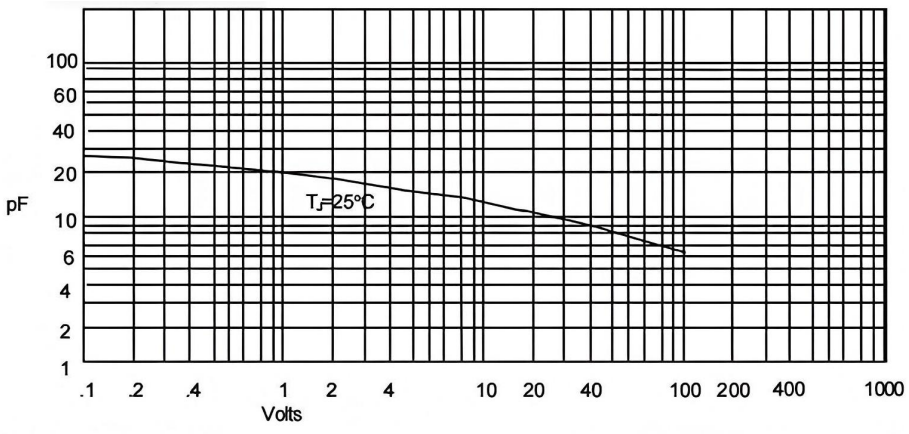
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Fig 2. Forward Derating Curve



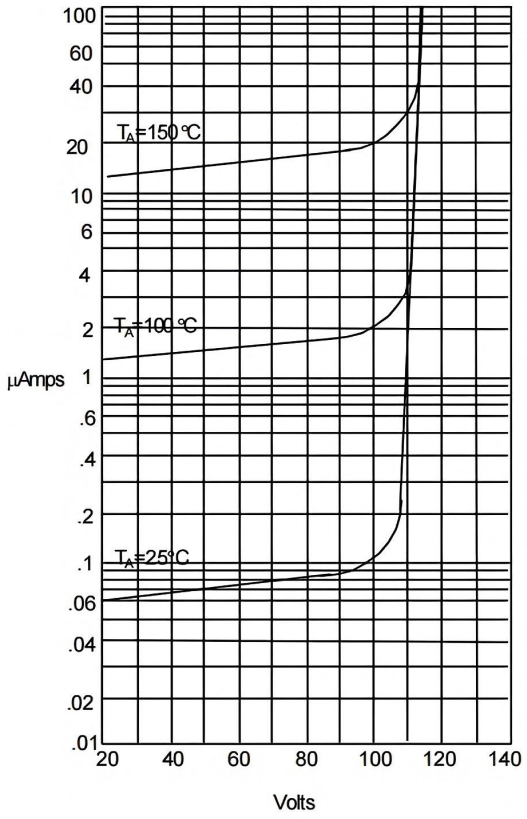
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - ℃

Fig 3.Junction Capacitance



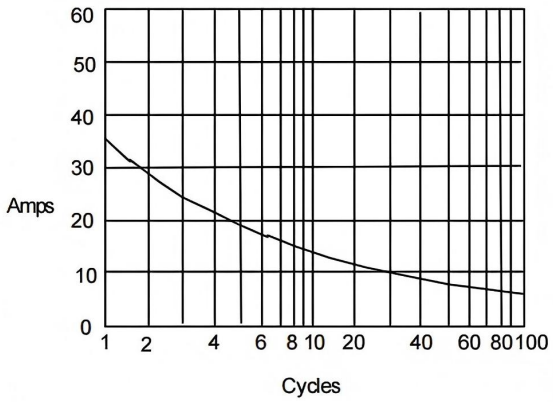
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Fig 4.Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*

Fig 5.Peak Forward Surge Current



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

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