Pb Free Plating Product

MUR1605 thru MUR1660

16.0 Amp.Glass Passivated Ultra Fast Recovery Rectifiers

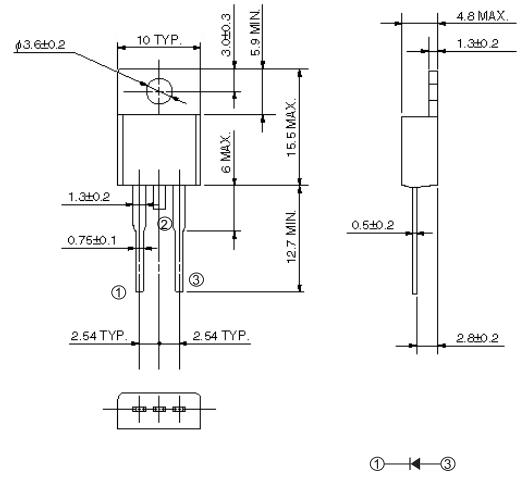
Features

- ✶ Fast switching for high efficiency
- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakage current
- ✶ High surge current capability

Mechanical Data

- ✶ Case: Molded TO-220AC
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-202 method 208
- ✶ Polarity:Color band denotes cathode
- ✶ Mounting position: Any
- ✶ Weight: 2.03 grams

TO-220AC Unit : inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	MUR 1605	MUR 1610	MUR 1615	MUR 1620	MUR 1630	MUR 1640	MUR 1660	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current @T_A =75 ℃	$I_{(AV)}$	16.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	300							A
Peak Forward Voltage at 16.0A DC	V_F	0.95				1.3		1.7	V
Maximum DC Reverse Current @T_J=25℃	I_R	10							μA
at Rated DC Blocking Voltage @T_J=100℃		150							
Maximum Reverse Recovery Time(Note1)	T_{RR}	35							nS
Typical Junction Capacitance (Note2)	C_J	80							pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	2.5							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							℃

NOTES:1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A

2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.

3.Thermal resistance junction to ambient

RATING AND CHARACTERTIC CURVES (MUR1605 thru MUR1660)

FIG.1- TYPICAL FORWARD CURRENT DERATING CURVE

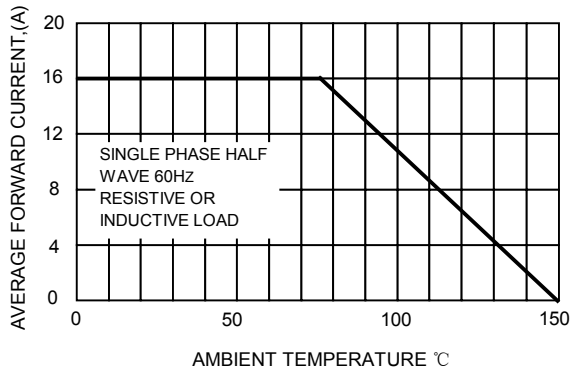


FIG.2-TYPICAL REVERSE CHARACTERISTICS

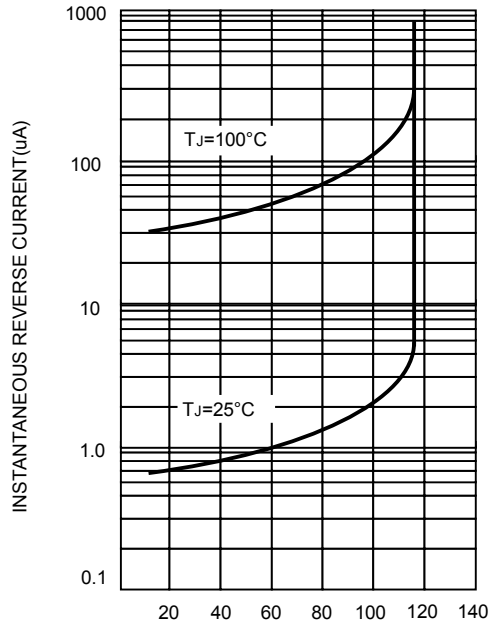


FIG.3-MAXIMUM NON-REPETITVE FORWARD SURGE CURRENT

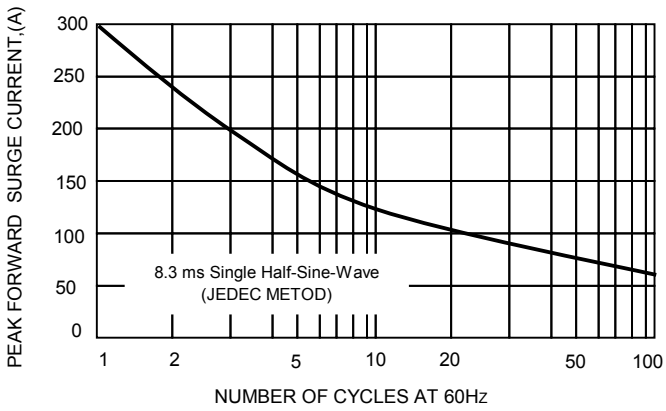


FIG.4-TYPICAL INSTANTAEOUS FORWARD CHARACTERISTICS

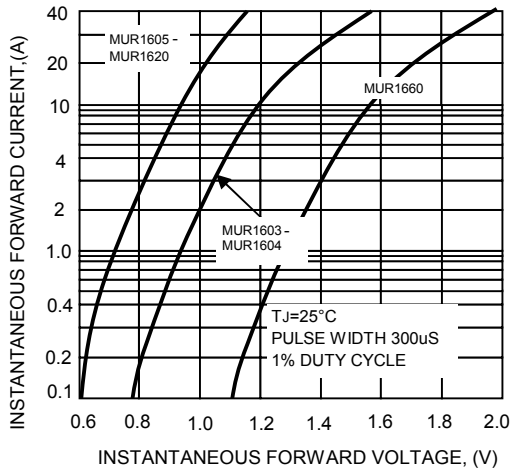


FIG.5-TYPICAL JUNCTION CAPACITANCE