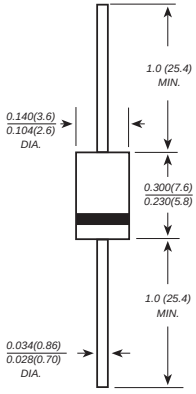
MUR120 THRU MUR160

ULTRA FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 1.0 Amperes

DO-15



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ultra fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  250°C/10 seconds,0.375"(9.5mm) lead length,
  5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-15 molded plastic body over passivated chip
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.014 ounce, 0.40 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

MDD Catalog Number	*SYMBOLS*	MUR120	MUR140	MUR160	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	VOLTS
Maximum RMS voltage	V_{RMS}	140	280	420	VOLTS
Maximum DC blocking voltage	V_{DC}	200	400	600	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length	$I_{(AV)}$	1.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35			Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.875	1.25		Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=150°C	I_R	2.0 50.0	5.0 150.0		μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	25	50		ns
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	27.0	50.0		°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175			°C

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A

2.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES MUR120 THRU MUR160

FIG. 1- FORWARD CURRENT DERATING CURVE

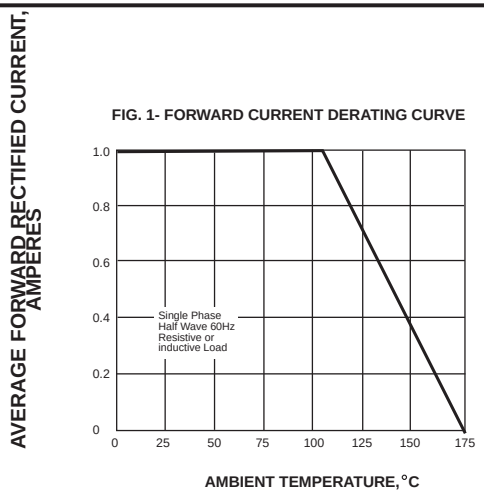


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

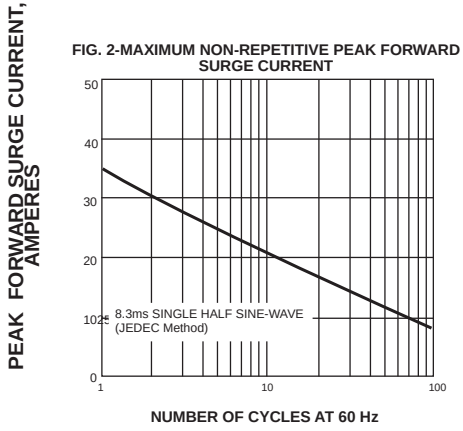


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

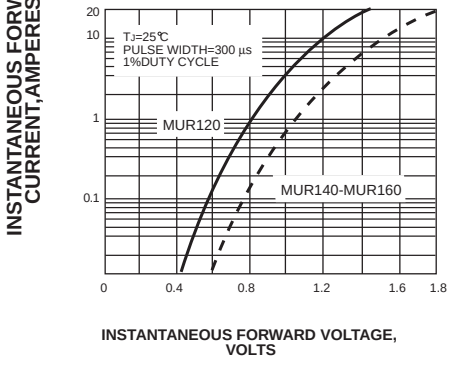


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

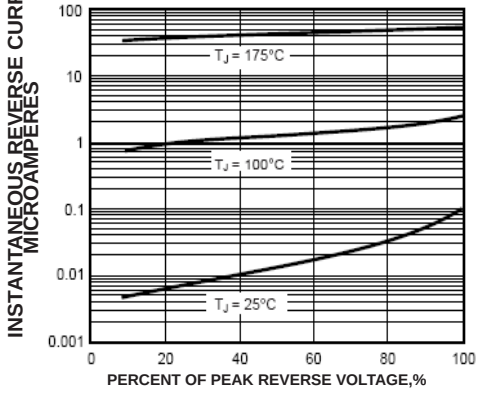


FIG. 5-TYPICAL JUNCTION CAPACITANCE