



WEET Technology Company Limited

Ultra-Fast Recovery Rectifiers

MUR140 THRU MUR160

VOLTAGE RANGE

400 to 600 Volts

CURRENT

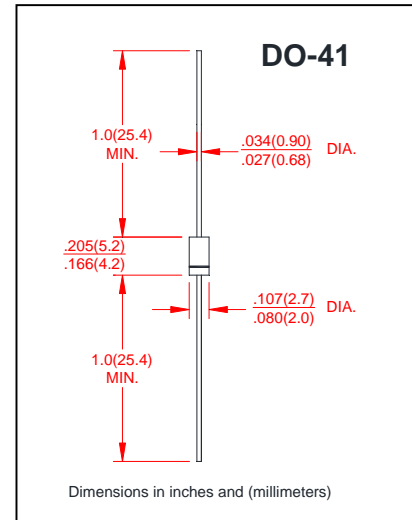
1.0 Ampere

FEATURES

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering guaranteed
260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs (2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any



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 derate current by 20%

	SYMBOLS	MUR140	MUR160	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	Volts
Maximum RMS Voltage	V_{RMS}	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	400	600	Volts
Maximum Average Forward Rectified Current at $T_A=55^\circ\text{C}$	$I_{(AV)}$	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	1.25		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25^\circ\text{C}$	5.0	μA
		$T_A = 100^\circ\text{C}$	150	
Maximum Reverse Recovery Time (NOTE 1)	T_{RR}	50		nS
Typical Junction Capacitance (NOTE 2)	C_J	25		pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$	50		$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

Notes:

- 1.Reverse Recovery Test Conditions: $I_f=0.5\text{A}, I_r=1.0\text{A}, I_{rr}=0.25\text{A}$.
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- 3.Thermal Resistance thermal Junction to Ambient at .375" (9.5mm) lead length, P.C. board mounted.



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CURRENT 1.0 Ampere

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

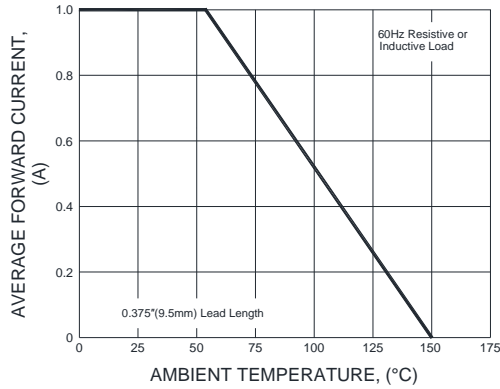


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

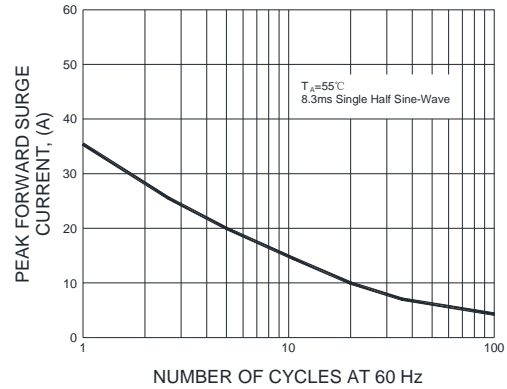


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

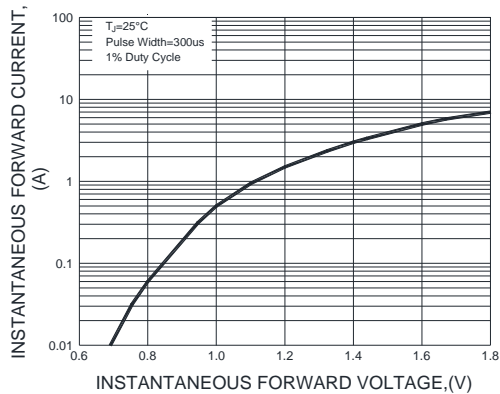


FIG.4-TYPICAL REVERSE CHARACTERISTICS

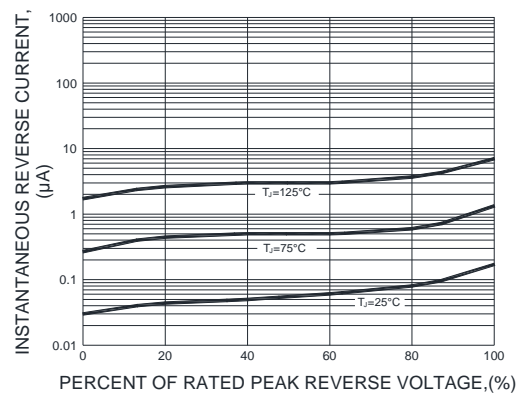


FIG.5-TYPICAL JUNCTION CAPACITANCE

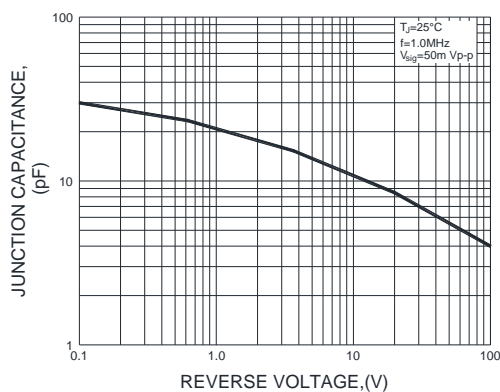
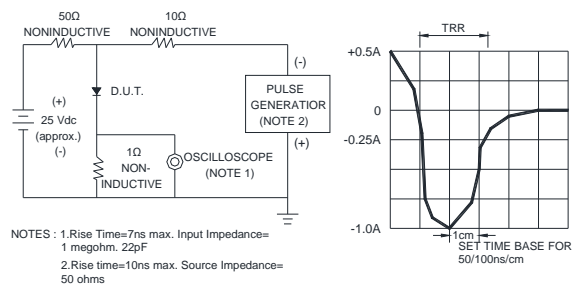


FIG.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.