



# WEET Technology Company Limited

## Ultra-Fast Recovery Rectifiers

**MURS140 THRU MURS160**

**VOLTAGE RANGE**  
**CURRENT**

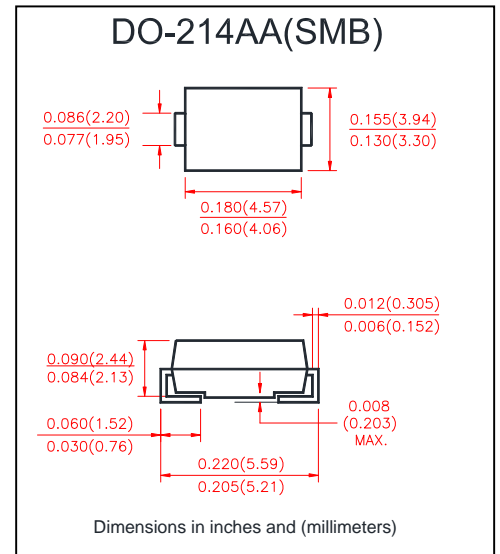
**400 to 600 Volts**  
**1.0 Ampere**

### FEATURES

- Low forward voltage drop
- High current capability
- Low power loss, high efficiency
- High reliability
- High surge current capacity
- High temperature soldering guaranteed

### MECHANICAL DATA

- Case: Mold 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
- Weight: 0.042ounce, 1.19 gram



### 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	MURS140	MURS160	
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	$I_{F(AV)}$	1		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 4.0A(NOTE1)	$V_F$	1.25		Volts
Maximum DC Reverse Current at rated DC blocking Voltage at	$T_A = 25^\circ C$	10		$\mu A$
	$T_A = 100^\circ C$	250		
Maximum Reverse Recovery Time ( $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$ )	$t_{rr}$	50		nS
Typical Junction Capacitance (NOTE2)	$C_J$	45		pF
Typical Thermal Resistance (NOTE3)	$R_{\theta JA}$	13		$^\circ C/W$
Operating Junction Temperature Range	$T_J$	(-55 to +150)		$^\circ C$
Storage Temperature Range	$T_{STG}$	(-55 to +150)		$^\circ C$

NOTE1.Pulse test:  $t_p = 300\mu S$ , duty cycle  $\leq 2\%$ .

NOTE2.Measured at 1.0MHz and applied reverse voltage of 4.0V

NOTE3.Thermal Resistance from Junction to Ambient with 1/2 " Lead length on P.C.Board with 1.5."x1.5 "copper pads.



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### RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

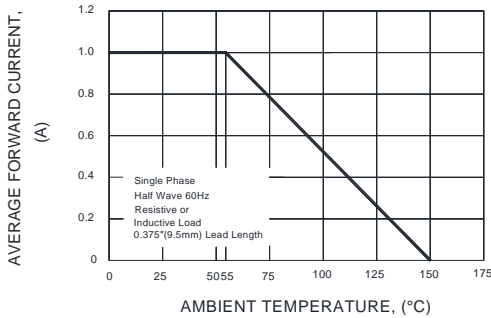


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

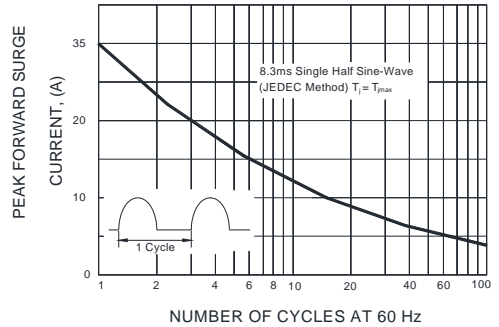


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

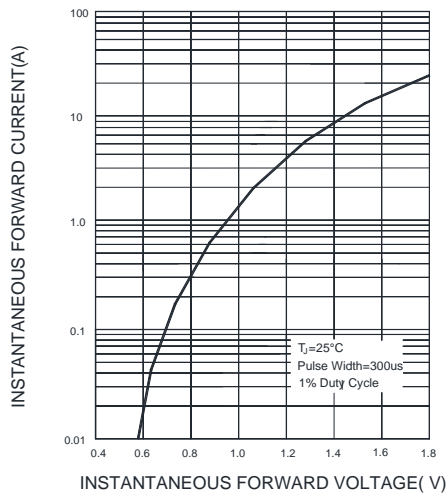
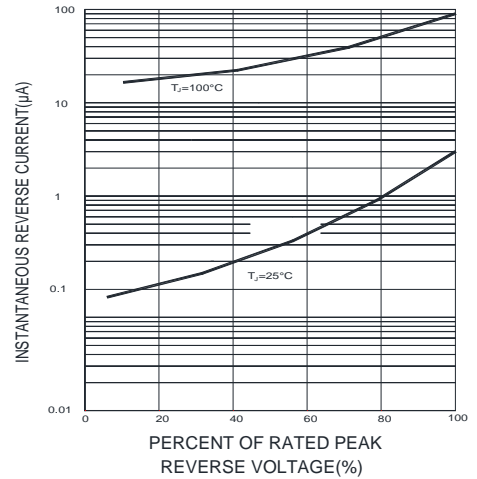


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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