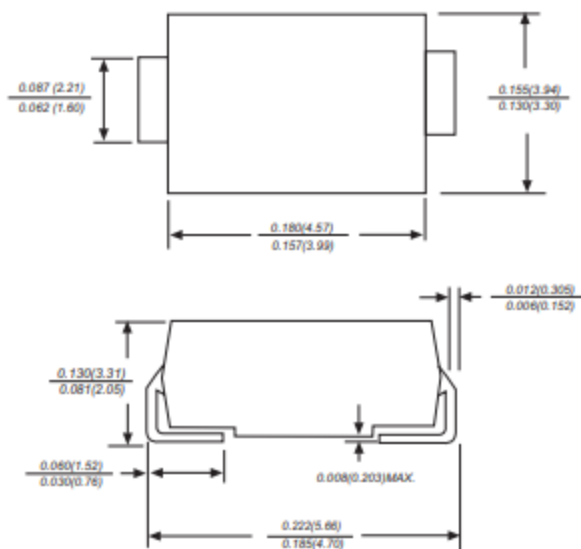


MURS140 THRU MURS160

SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 400 to 600 Volts Forward Current - 1.0 Ampere

DO-214AA



Dimensions in inches and (millimeters)

FEATURES

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
For surface mounted applications
Super fast switching for high efficiency
Low reverse leakage
Built-in strain relief, ideal for automated placement
High forward surge current capability
High temperature soldering guaranteed:
260°C ± 5°C 10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

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 current derate by 20%.

	SYMBOLS	MURS140	MURS160	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		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0		Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.25		Volts
Maximum DC reverse current $T_A=25^{\circ}\text{C}$ at rated DC blocking voltage $T_A=100^{\circ}\text{C}$	I_R	5.0 50.0		μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50		ns
Typical junction capacitance (NOTE 2)	C_J	15.0		pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	60.0		$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150		$^{\circ}\text{C}$

Note: 1. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas