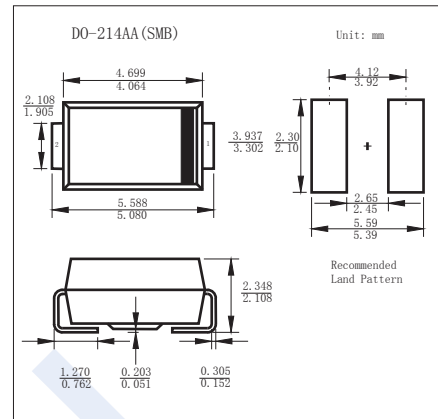


## Ultrafast Rectifier Diodes

## MURS260 (KURS260)

## ■ Features

- Glass passivated chip junction
- Ultrafast reverse recovery time
- Low switching losses, high efficiency
- High forward surge capability

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_{RM}$	600	V
Average Forward Current @ $T_L=125^\circ\text{C}$	$I_{FAV}$	2	A
Peak Forward Surge Current @ 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	35	
Thermal Resistance Junction to Lead	$R_{\theta JL}$	15	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_J$	175	$^\circ\text{C}$
Storage Temperature range	$T_{stg}$	-65 to 175	

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$			1.45	V
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$			1.2	
Reverse voltage leakage current	$I_R$	$T_J = 25^\circ\text{C}$			5	$\mu\text{A}$
		$T_J = 125^\circ\text{C}$			150	
Reverse recovery time	$t_{rr}$	$I_F = 0.5\text{ A}, I_R = 1\text{ A}, I_{rr} = 0.25\text{ A}$			50	ns
Reverse recovery time	$t_{rr}$	$I_F = 1\text{ A}, di/dt = 50\text{ A}/\mu\text{s}, V_R = 30\text{ V}, I_{rr} = 10\% I_{RM}$			75	
Reverse recovery time	$t_{rr}$	$I_F = 1\text{ A}, di/dt = 100\text{ A}/\mu\text{s}, \text{recovery to } 1\text{ V}$			50	

## ■ Marking

Marking	M2J
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# Ultrafast Rectifier Diodes

## MURS260 (KURS260)

### ■ Typical Characteristics

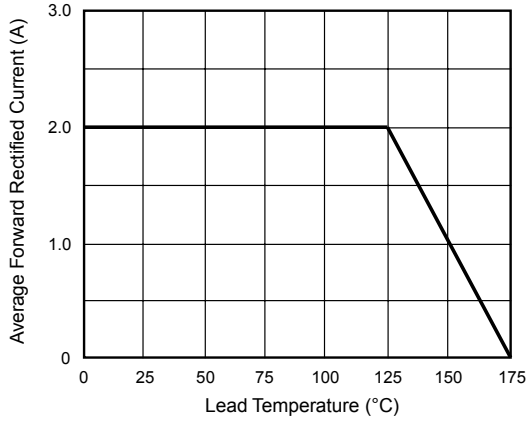


Figure 1. Forward Current Derating Curve

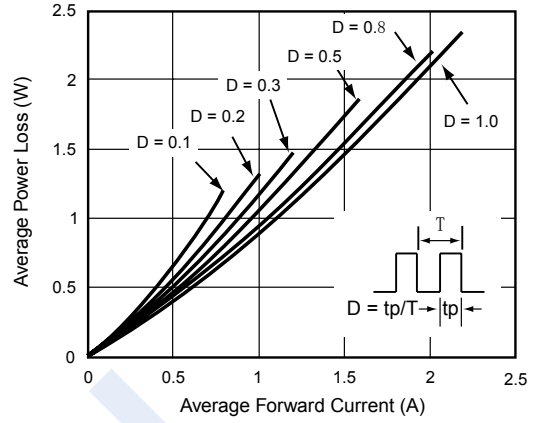


Figure 2. Forward Power Loss Characteristics

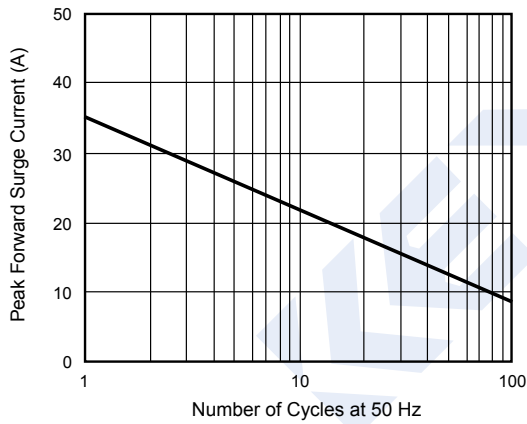


Figure 3. Maximum Non-Repetitive Peak Forward Surge Current

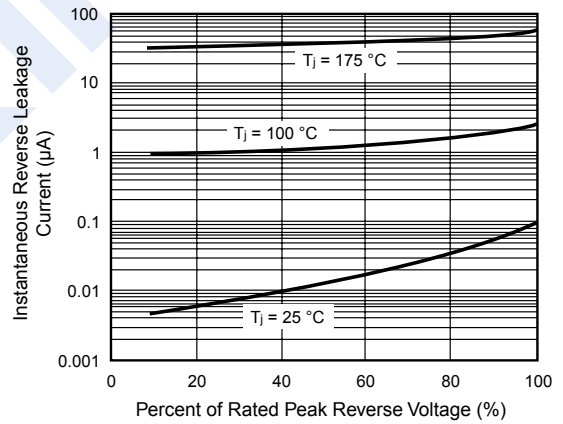


Figure 5. Typical Reverse Leakage Characteristics

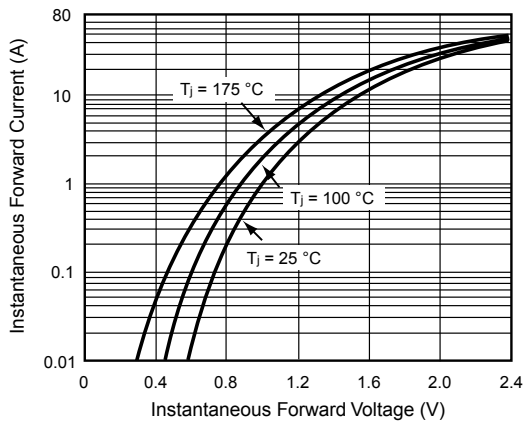


Figure 4. Typical Instantaneous Forward Characteristics

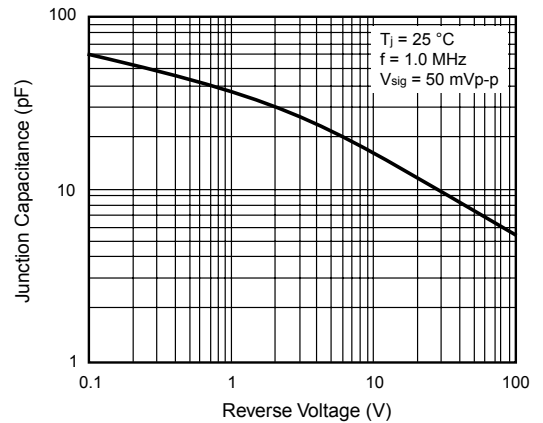


Figure 6. Typical Junction Capacitance