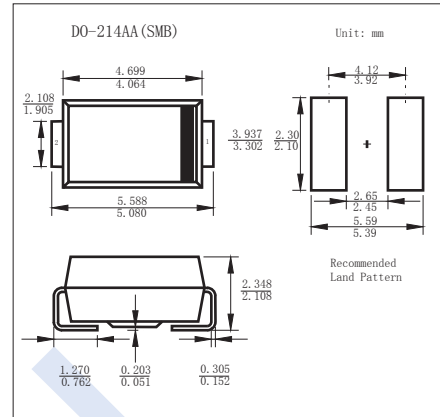


Ultrafast Rectifier Diodes

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	μA
		$T_J = 125^\circ\text{C}$			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

Ultrafast Rectifier Diodes

MURS260 (KURS260)

■ Typical Characteristics

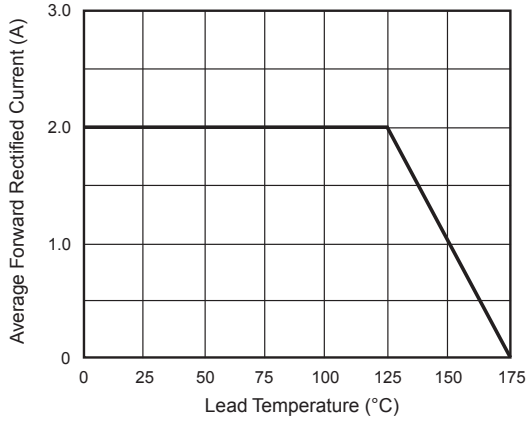


Figure 1. Forward Current Derating Curve

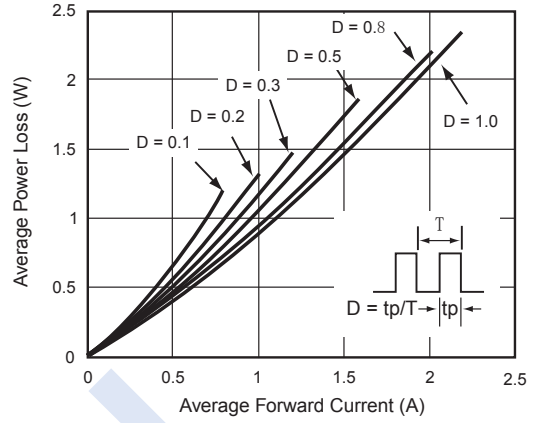


Figure 2. Forward Power Loss Characteristics

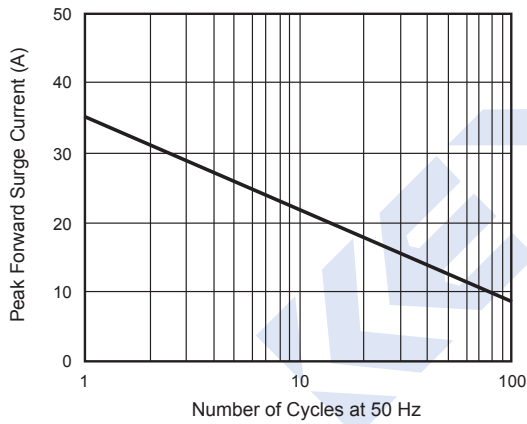


Figure 3. Maximum Non-Repetitive Peak Forward Surge Current

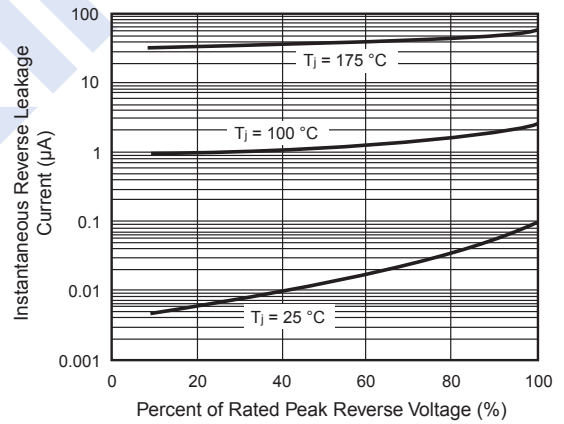


Figure 5. Typical Reverse Leakage Characteristics

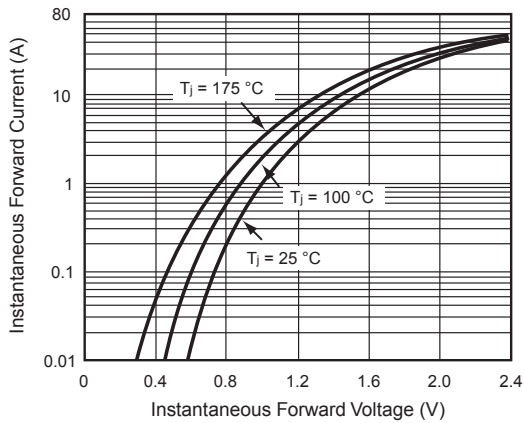


Figure 4. Typical Instantaneous Forward Characteristics

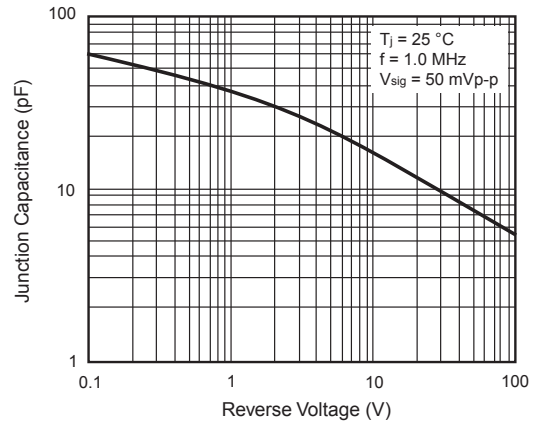


Figure 6. Typical Junction Capacitance