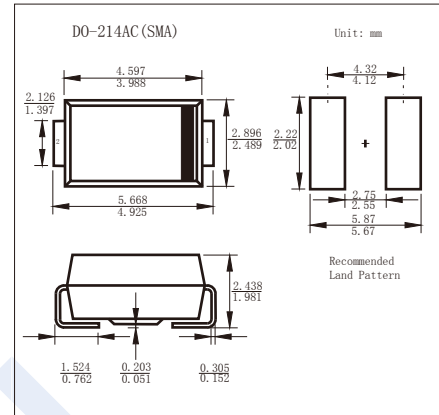


Surface Mount Ultrafast Plastic Rectifier MURS140

■ Features

- Ultrafast recovery time for high efficiency
- Glass passivated junction
- For surface mount applications



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

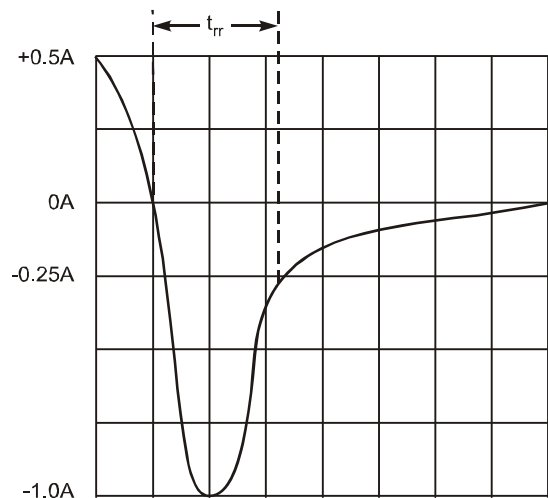
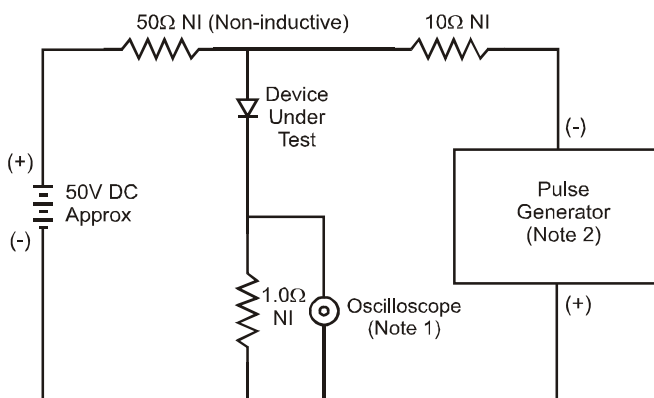
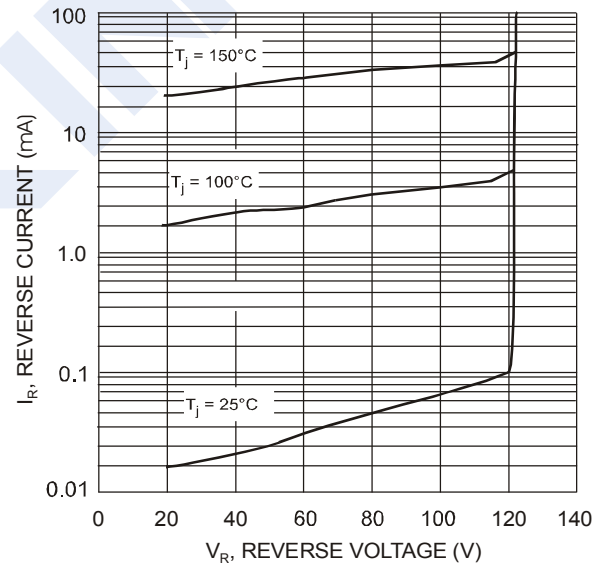
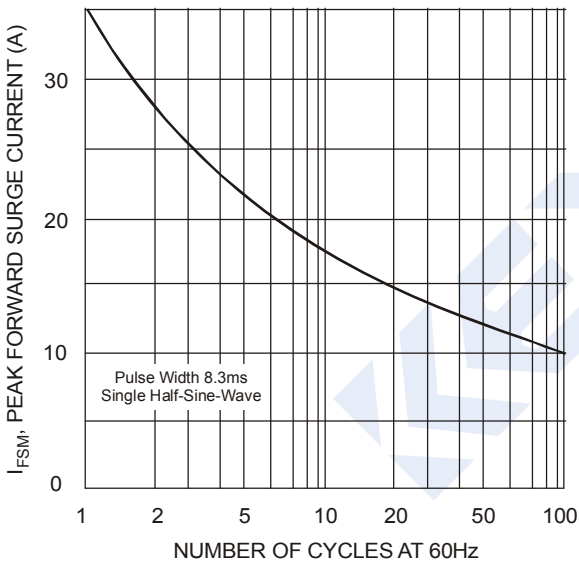
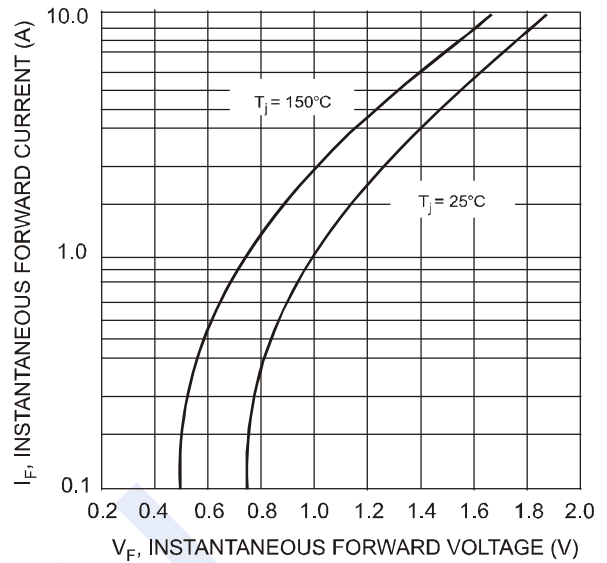
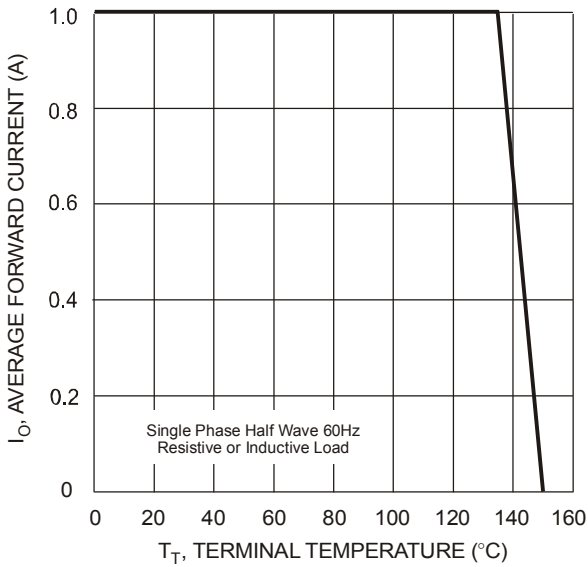
Parameter	Symbol	Rating	Unit
Reverse voltage	V_{RM}	400	V
Forward current	I_F	1.0	A
Peak forward surge current	I_{FM}	35	
Thermal Resistance Junction to Case	$R_{\theta JC}$	15	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 175	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu\text{A}$	400			V
Forward voltage	V_{F1}	$I_F = 1\text{A}$			1.25	
	V_{F2}	$I_F = 1\text{A}$ $T_a = 150^\circ\text{C}$			1.05	
Reverse voltage leakage current	I_{R1}	$V_R = 400\text{V}$			5	μA
	I_{R2}	$V_R = 400\text{V}$ $T_a = 150^\circ\text{C}$			150	
Junction capacitance	C_j	$V_R = 4\text{V}$, $f = 1\text{MHz}$			10	pF
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}	$I_F = 1\text{A}$, $di/dt = 100\text{A}/\mu\text{s}$, $\text{Duty Cycle} \leq 2\%$			50	ns

MURS140

Typical Characteristics



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

Set time base for 50/100 ns/cm