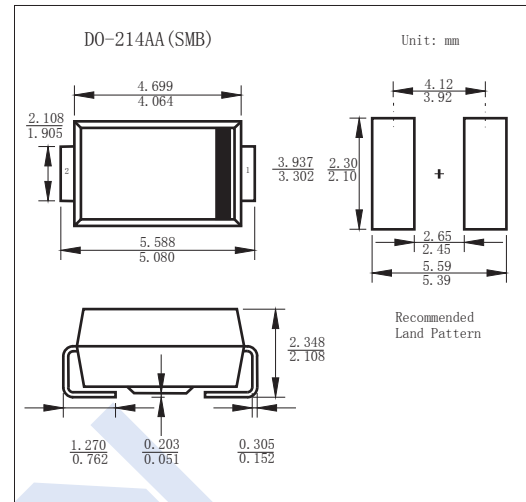


Rectifier Diodes

US2A ~ US2M

■ Features

- Super Fast Switching For High Efficiency
- Low Forward Voltage Drop And High Current Capability
- Low Reverse Leakage Current
- Glass Passivated Chip

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

Parameter	Symbol	US2A	US2B	US2C	US2D	US2G	US2J	US2K	US2M	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	105	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	400	600	800	1000	
Forward Voltage@ $T_J=25^\circ\text{C}$ $I_{FM}=2\text{A}$	V_F	1				1.4	1.7			A
Averaged Forward Current.@ $T_L=110^\circ\text{C}$	I_{FAV}	2								
Peak Forward Surge Current @ 8.3ms	I_{FSM}					50				μA
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R					5 350				
Maximum Reverse Current (Note.1)	t_{rr}	50				100				ns
Typical Junction Capacitance (Note.2)	C_j					28				pF
Thermal Resistance.Junction- to-Ambient	R_{thJA}					20				$^\circ\text{C}/\text{W}$
Junction Temperature	T_j					150				$^\circ\text{C}$
Storage Temperature	T_{stg}					-55 to 150				

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

Note.2: Measured at 1.0MHz, $V_R=4.0\text{V}$

■ Marking

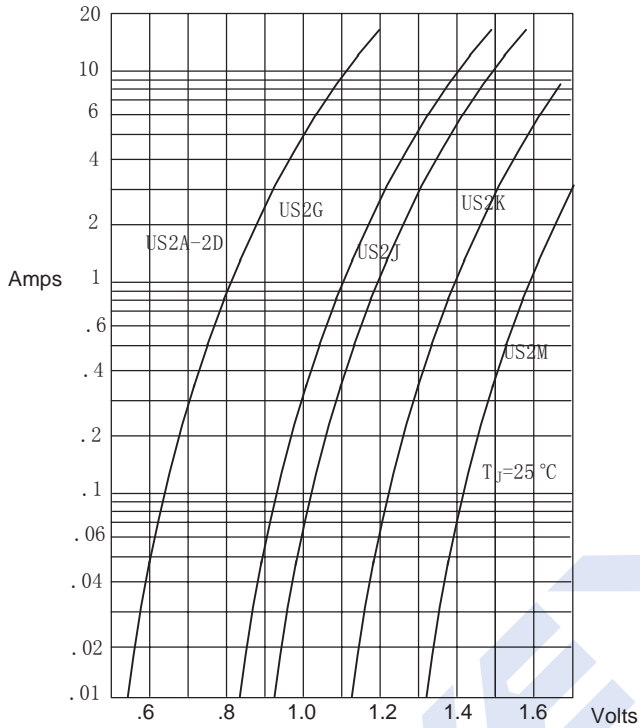
NO.	US2A	US2B	US2C	US2D	US2G	US2J	US2K	US2M
Marking	US2A	US2B	US2C	US2D	US2G	US2J	US2K	US2M

Rectifier Diodes

US2A ~ US2M

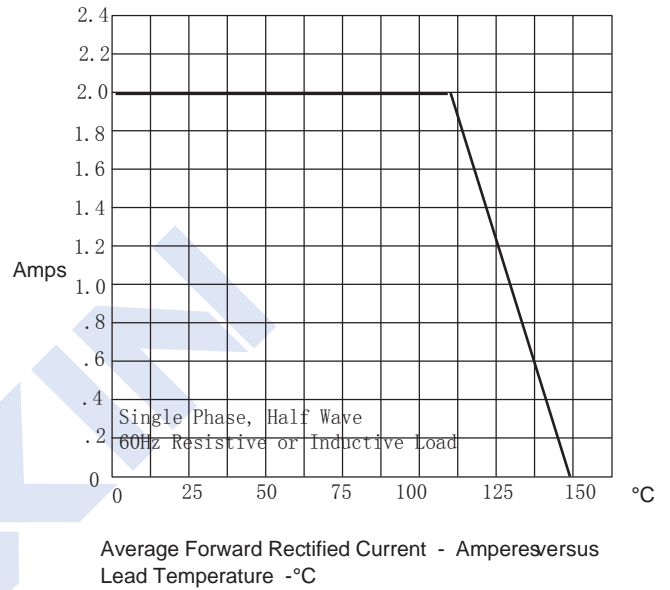
■ Typical Characteristics

Figure 1
Typical Forward Characteristics



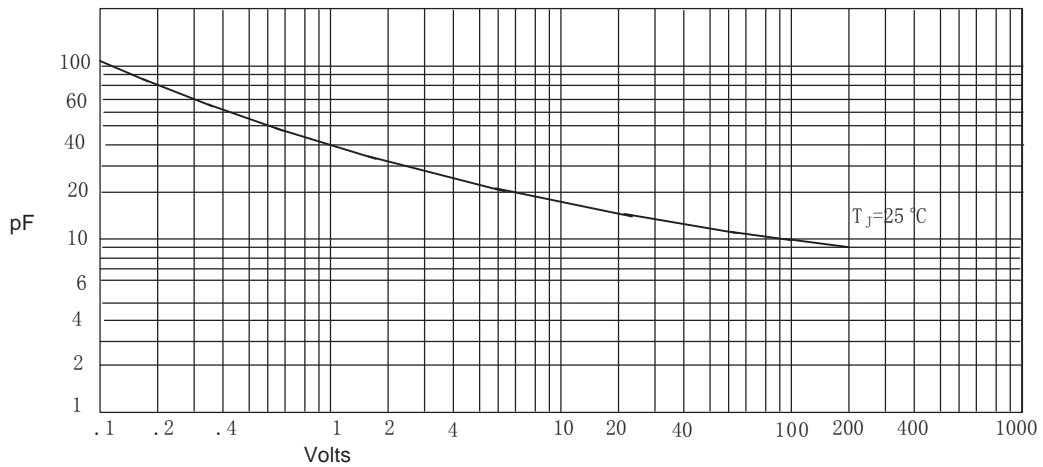
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Lead Temperature - $^\circ\text{C}$

Figure 3
Junction Capacitance



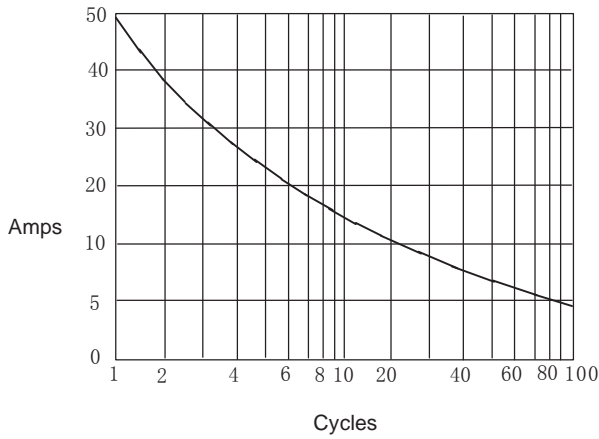
Junction Capacitance - pF versus
Reverse Voltage - Volts

Rectifier Diodes

US2A ~ US2M

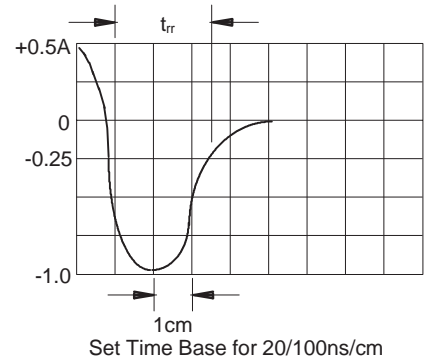
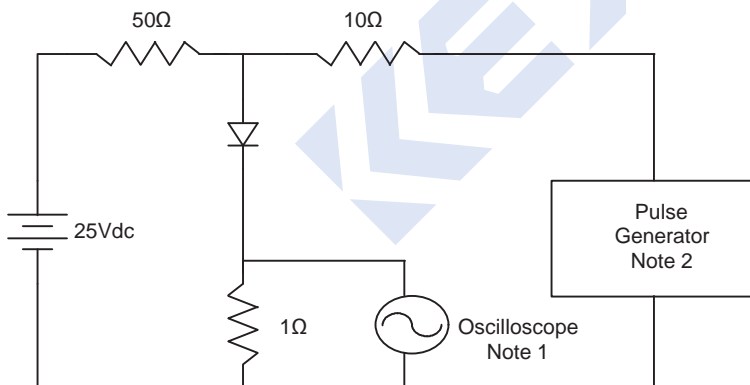
■ Typical Characteristics

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive