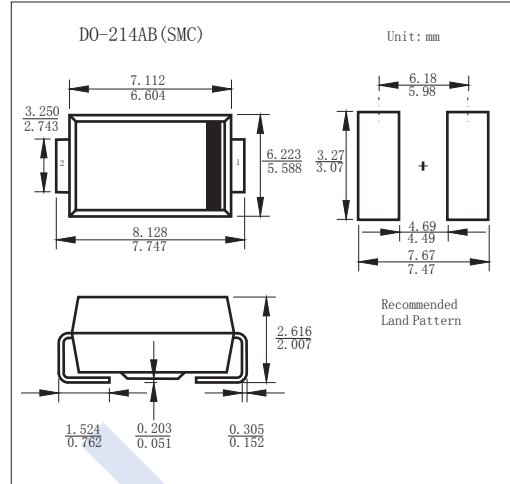


## Rectifier Diodes

## US3A ~ US3M

## ■ Features

- For surface mount applications
- Low profile package
- Easy pick and place
- Ultrafast recovery times for high efficiency
- Low forward voltage, low power loss
- Plastic package has underwriters laboratories flammability classification 94V-0



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	US3A	US3B	US3D	US3G	US3J	US3K	US3M	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	
Forward Voltage @ T <sub>J</sub> =25°C I <sub>F</sub> M=3A	V <sub>F</sub>	1			1.7				
Averaged Forward Current @ T <sub>L</sub> =110°C	I <sub>FAV</sub>				3				A
Peak Forward Surge Current @ 8.3ms	I <sub>FSM</sub>				100				
Maximum DC Reverse Current Ta=25°C	I <sub>R</sub>				10				μA
Ta=125°C					500				
Maximum Reverse Current (Note.1)	t <sub>rr</sub>	50			75				ns
Typical Junction Capacitance (Note.2)	C <sub>j</sub>	70			50				pF
Thermal Resistance.Junction- to-Ambient	R <sub>thJA</sub>				25				°C/W
Junction Temperature	T <sub>j</sub>				150				°C
Storage Temperature	T <sub>stg</sub>				-55 to 150				

Note.1: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A

Note.2: Measured at 1.0MHz, V<sub>R</sub>=4.0V

## ■ Marking

NO.	US3A	US3B	US3D	US3G	US3J	US3K	US3M
Marking	US3A	US3B	US3D	US3G	US3J	US3K	US3M

# Rectifier Diodes

## US3A ~ US3M

■ Typical Characteristics

FIG.1 – FORWARD CURRENT DERATING CURVE

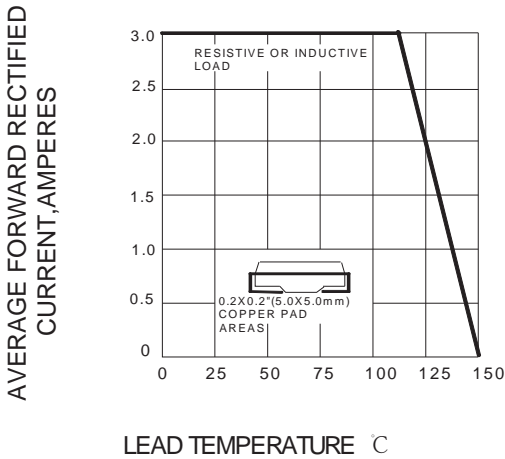


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

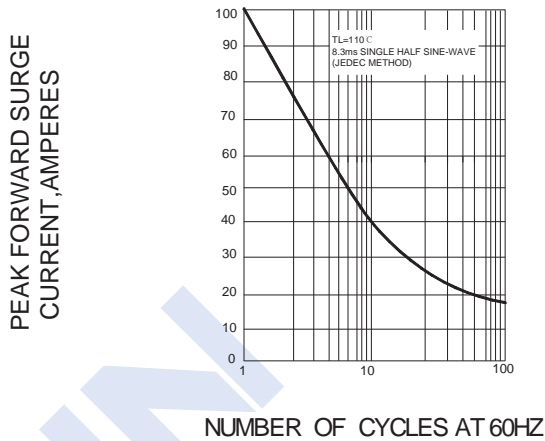


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

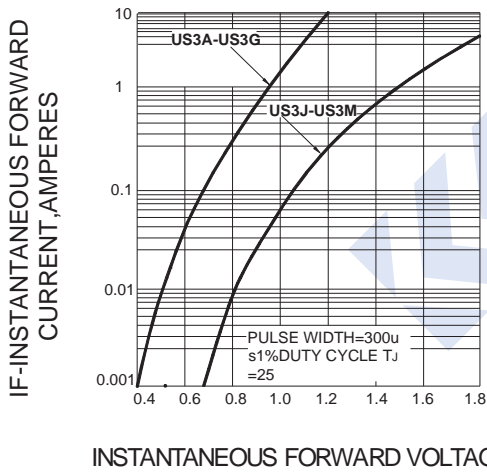


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

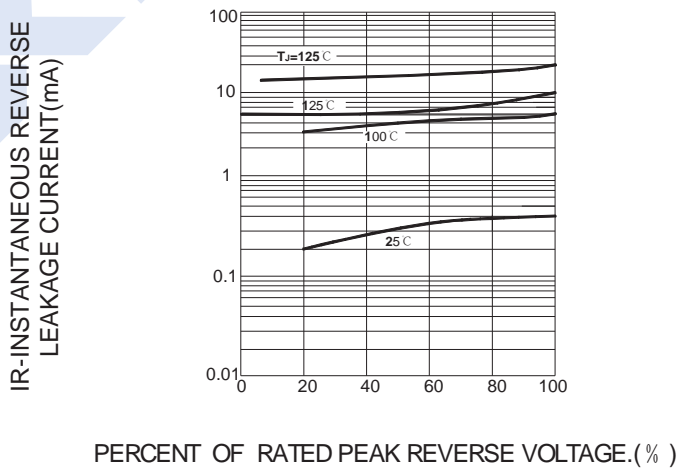


FIG.5 – TYPICAL JUNCTION CAPACITANCE

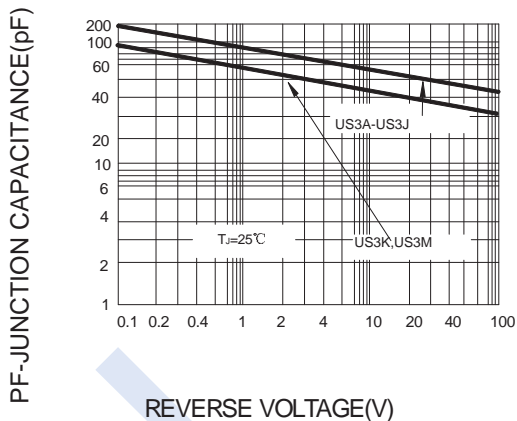


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

