

# SFPX-63

**PRV : 300 Volts**  
**I<sub>o</sub> : 2.0 Ampere**

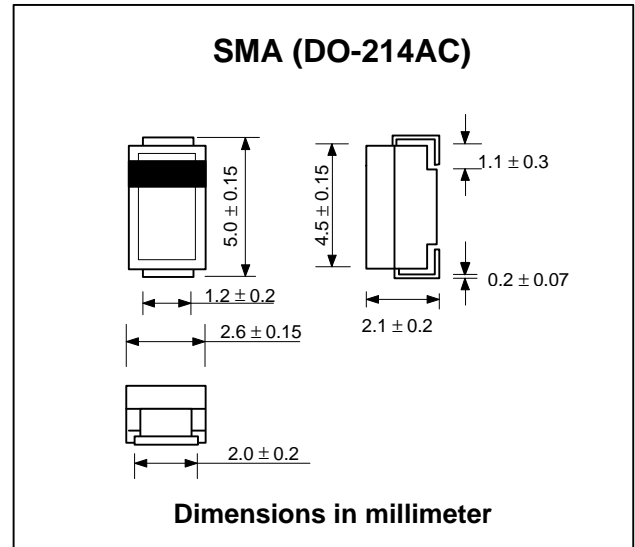
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.064 gram

# SURFACE MOUNT ULTRA FAST RECOVERY RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Peak Reverse Voltage	V <sub>RM</sub>	300	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	2.0	A
Maximum Peak Forward Surge Current, Half-cycle Sinewave Single Shot, 50 Hz	I <sub>FSM</sub>	20	A
Maximum Forward Voltage at I <sub>F</sub> = 2.0 A	V <sub>F</sub>	1.3	V
Maximum Reverse Current at V <sub>R</sub> = V <sub>R(RM)</sub> Ta = 25 °C	I <sub>R</sub>	50	μA
Maximum Reverse Current at V <sub>R</sub> = V <sub>R(RM)</sub> Ta = 150 °C	I <sub>R(H)</sub>	3.0	mA
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	30	ns
Thermal Resistance from Junction to Case	R <sub>th(j-c)</sub>	20	°C/W
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150	°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150	°C

### Note :

(1) Reverse Recovery Test Conditions : I<sub>F</sub> = 100 mA, I<sub>RP</sub> = 100 mA.

## RATING AND CHARACTERISTIC CURVES ( SFPX-63 )

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

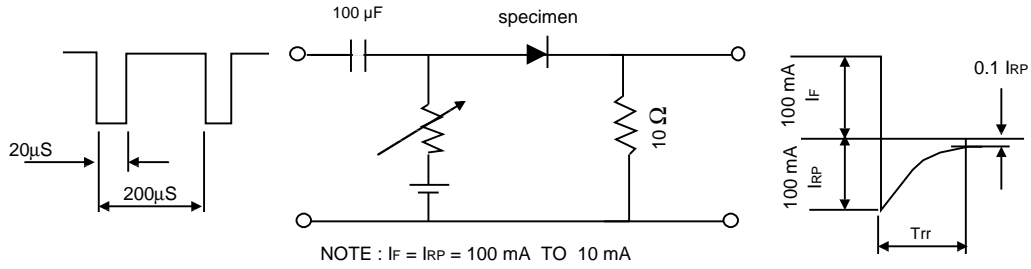


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

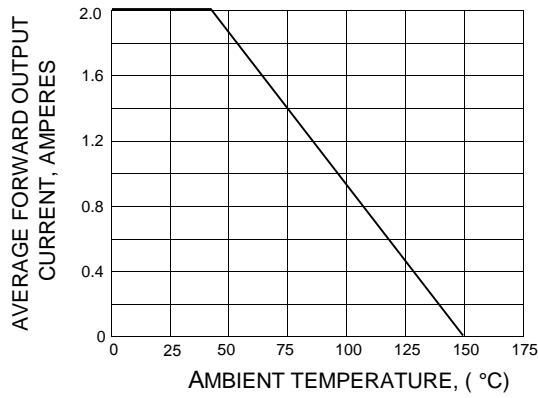


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

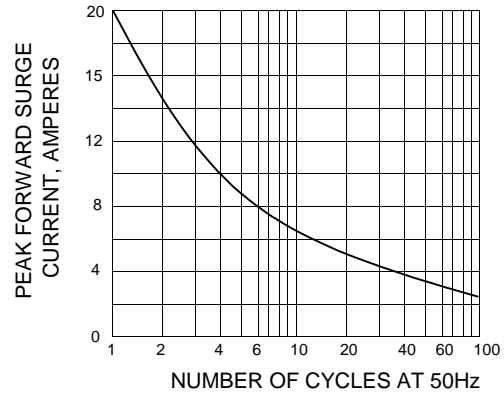


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

