

### ■ FEATURES

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Super Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### ■ TYPICAL APPLICATIONS

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

### ■ MECHANICAL DATA

- **Package:** DO-214AC(SMA)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### ■ MAXIMUM RATINGS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURS220A	MURS240A	MURS260A
Device marking code			MURS220A	MURS240A	MURS260A
Repetitive peak reverse voltage	VRRM	V	200	400	600
Average rectified output current @60Hz sine wave, resistance load, TL (Fig.1)	I <sub>O</sub>	A	2.0		
Surge(non-repetitive)forward current @ 60Hz half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	50		
Storage temperature	T <sub>stg</sub>	°C	-55~+150		
Junction temperature	T <sub>j</sub>	°C	-55~+150		

### ■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MURS220A	MURS240A	MURS260A
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =2.0A	0.92	1.25	
Maximum reverse recovery time	T <sub>RR</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>r</sub> =0.25A	25	50	
Maximum DC reverse current at rated DC blocking voltage per diode@ VRM=VRRM	I <sub>RRM</sub>	μA	T <sub>a</sub> =25°C	5.0		
			T <sub>a</sub> =125°C	50		

### ■ THERMAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MURS220A	MURS240A	MURS260A
Typical Thermal resistance	R <sub>θJ-A</sub>	°C/W	65 <sup>1)</sup>		
	R <sub>θJ-L</sub>		30 <sup>1)</sup>		

Note: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ **CHARACTERISTICS (TYPICAL)**

FIG1: Io-TL Curve

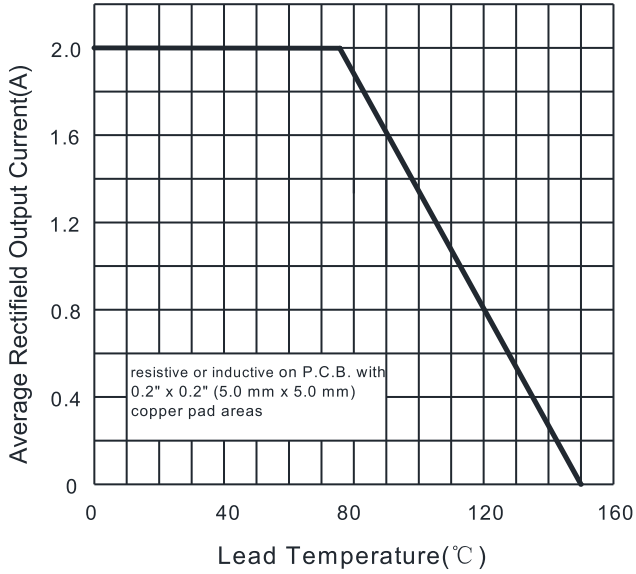


FIG2: Surge Forward Current Capability

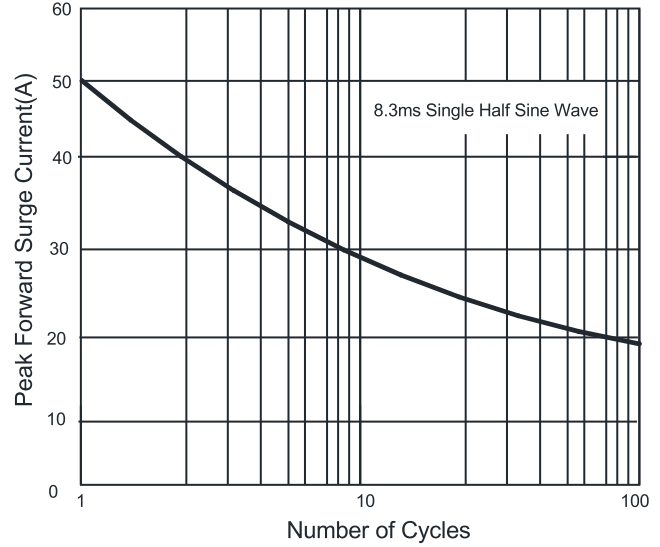


FIG3: Forward Voltage

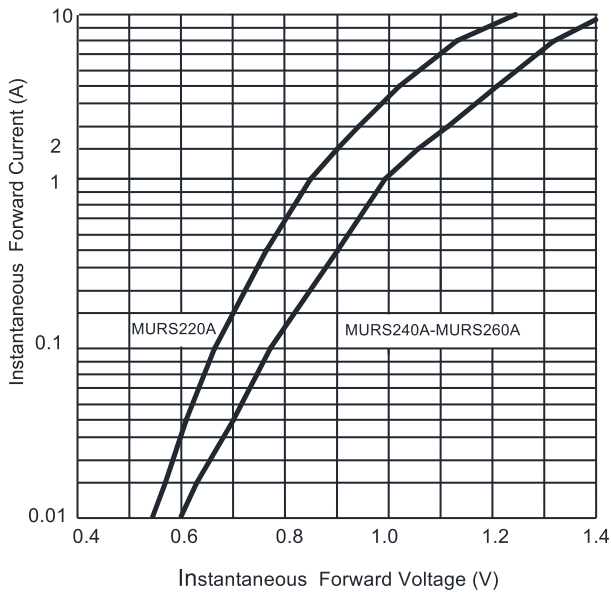


FIG4: Typical Reverse Characteristics

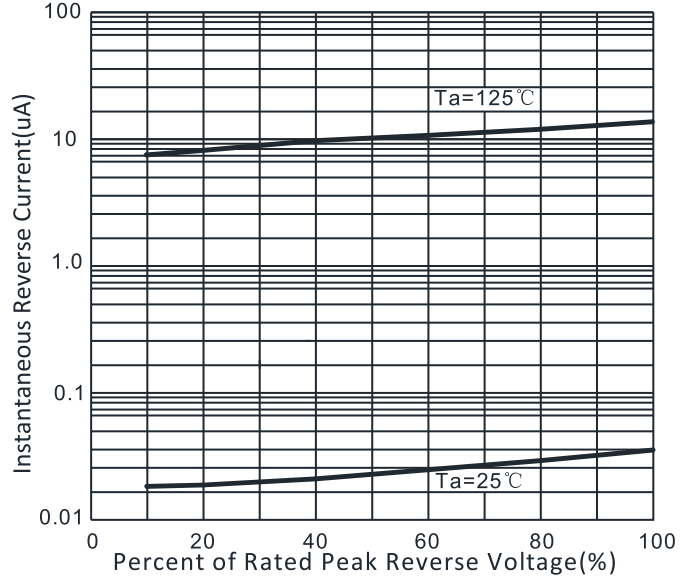
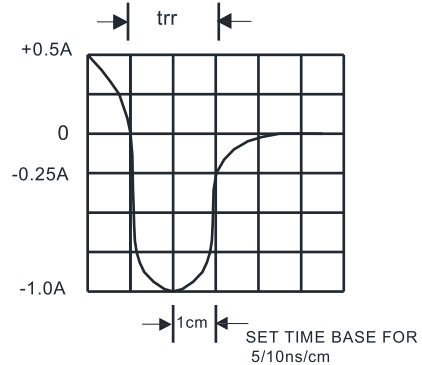
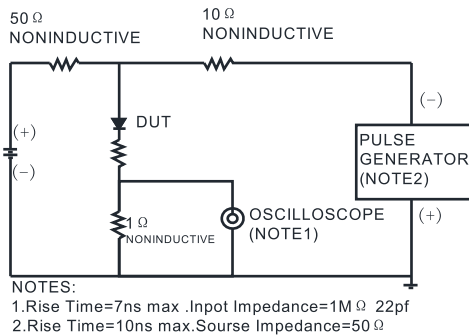


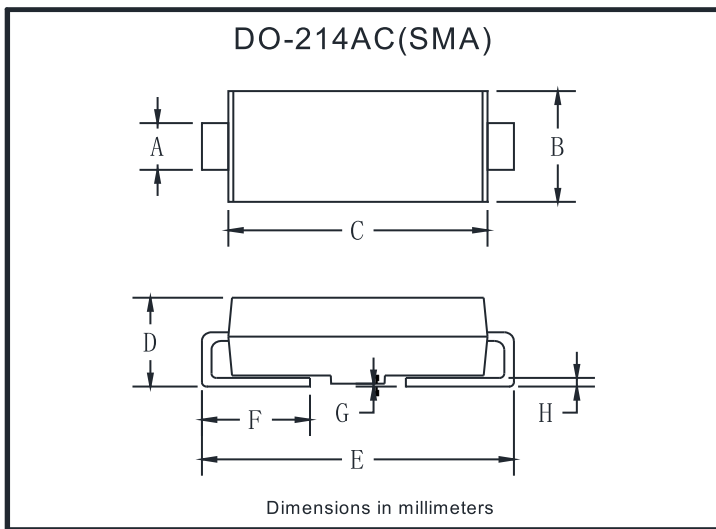
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



**PACKAGING INFORMATION**

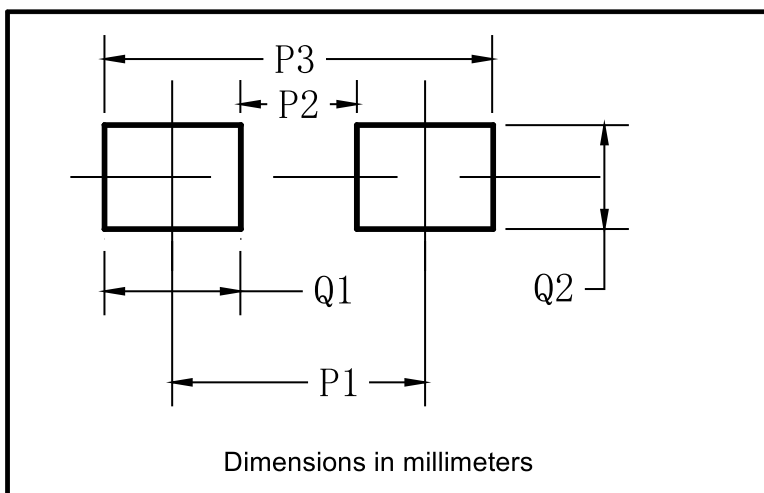
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MURS220A-MURS260A	F1	Approximate 0.059	5000	10000	80000	13" reel
MURS220A-MURS260A	F2	Approximate 0.059	7500	15000	120000	13" reel
MURS220A-MURS260A	F3	Approximate 0.059	7500	15000	60000	13" reel
MURS220A-MURS260A	F4	Approximate 0.059	1800	7200	57600	7" reel
MURS220A-MURS260A	F5	Approximate 0.059	2000	8000	64000	7" reel
MURS220A-MURS260A	F6	Approximate 0.059	5000	10000	100000	13" reel

**OUTLINE DIMENSIONS**



DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.25	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.08	0.20
H	0.15	0.31

**SUGGESTED PAD LAYOUT**



DO-214AC(SMA)	
Dim	Millimeters
P1	4.00
P2	1.50
P3	6.50
Q1	2.50
Q2	1.70