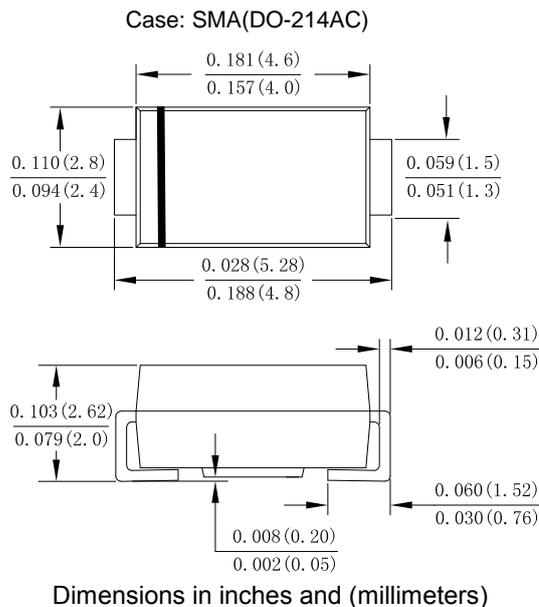


### Features

- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number



### Maximum Ratings and Electrical Characteristics

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

Type Number	SYMBOL	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed On Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Forward Voltage @ $I_F = 1.0A$	$V_{FM}$	1.0		1.3		1.7			V
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	5.0							$\mu A$
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		200							
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	50				75			ns
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ C$

Note: 1.Reverse Recovery Test Conditions: $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$ .

Fig. 1 Forward Current Derating Curve

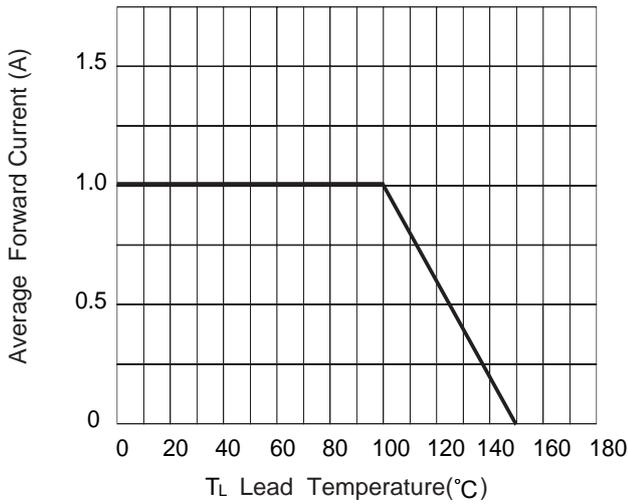


Fig. 2 Typ. Forward Characteristics

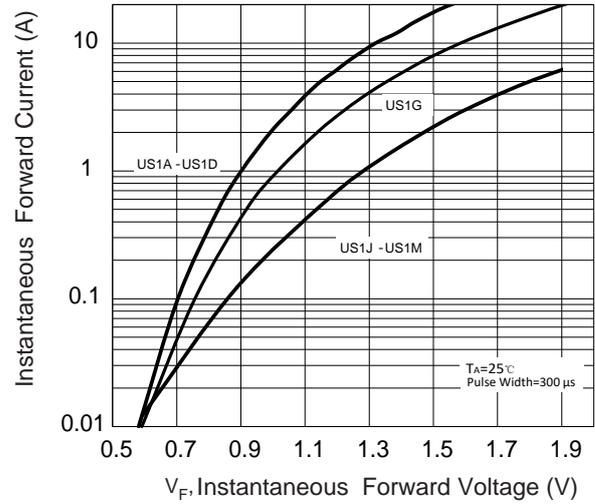


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

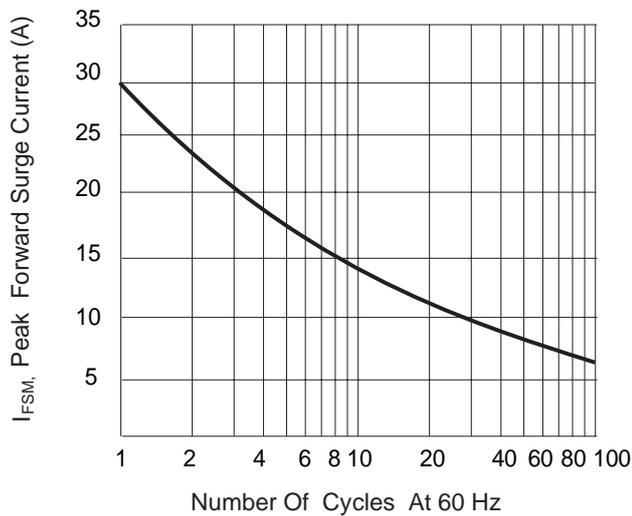


Fig.4 Typical Reverse Characteristics

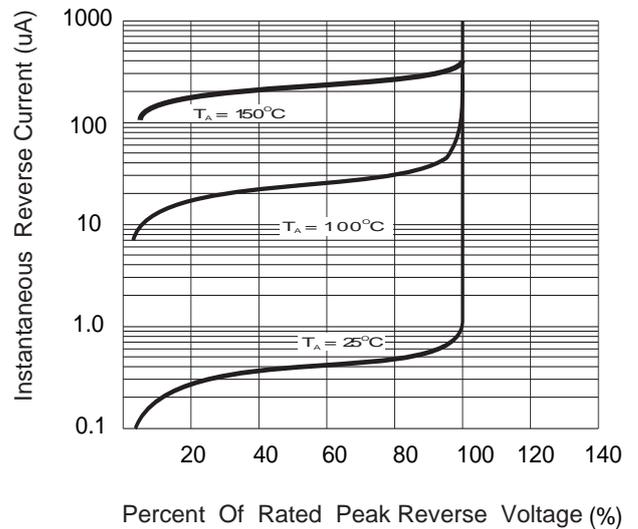


Fig.5 Mounting PAD Layout

