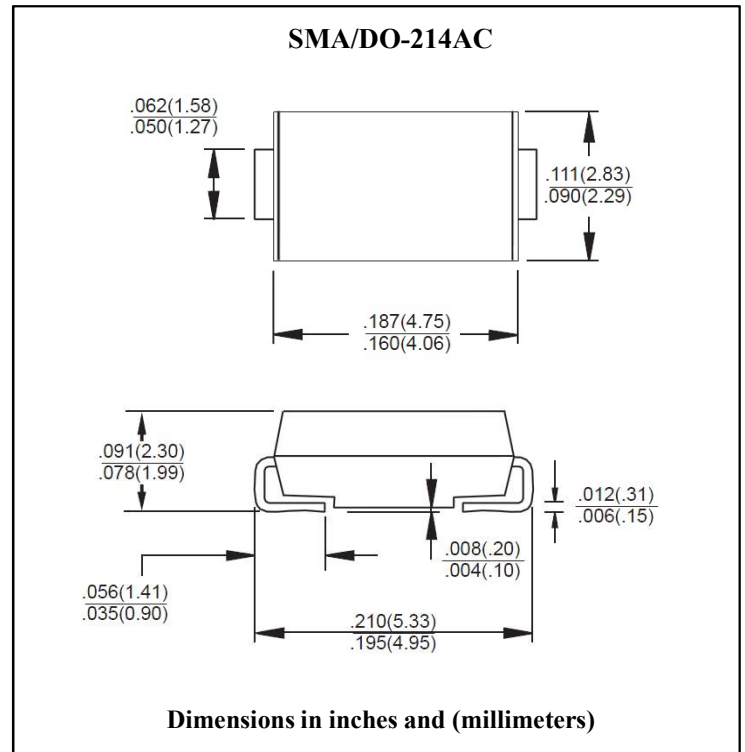
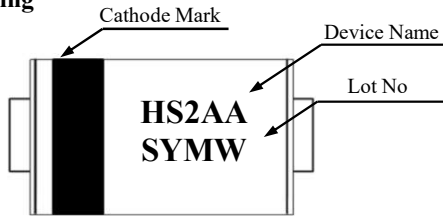


High Efficient Surface Mount Rectifiers
Reverse Voltage 50 to 1000 Volts Forward Current 2.0 Amperes
Features

- For surface mounted application
- Glass passivated junction chip
- Low forward voltage drop
- Low profile package
- Built-in stain relief, ideal for automatic placement
- Fast switching for high efficiency
- Plastic material used carries underwriters laboratory classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

Mechanical Data

- Case : Molded plastic
- Terminals : Solder plated
- Polarity : Indicated by cathode band
- Weight : 0.064gram

Marking

Maximum Ratings & Electrical Characteristics

Ratings 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%

Parameter	Symbol	HS2AA	HS2BA	HS2DA	HS2FA	HS2GA	HS2JA	HS2KA	HS2MA	Unit	Remark	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V		
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V		
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V		
Maximum Average Forward Rectified Current See Fig.1	$I_F(AV)$	2.0								A		
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50								A		
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.0				1.3		1.7		V		
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0								uA	Ta=25°C	
		100								uA	Ta=100°C	
Maximum Reverse Recovery Time	trr	50					75				ns	Note 1
Typical Junction Capacitance	C_J	50					30				pF	Note 2
Typical Thermal Resistance	Rth(j-a)	80								°C /W	Note 3	
Operation Junction Temperature Range	T_J	-55 to +150								°C		
Storage Temperature Range	T_{STG}	-55 to +150								°C		

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

Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 3. Mounted on P.C.B with 0.4"×0.4" (10mm×10mm) Copper Pad Areas

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

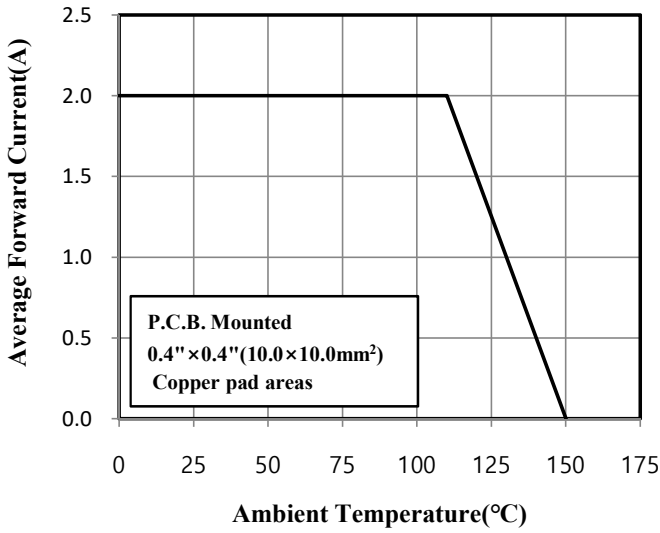


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

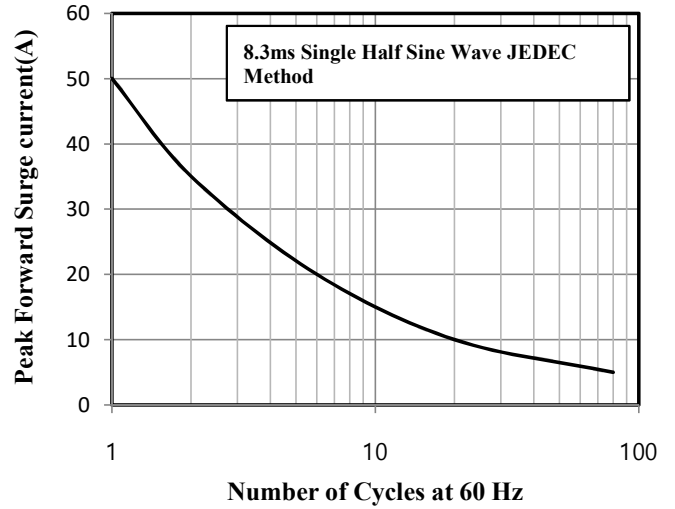


Fig.3 Typical Instantaneous Forward Characteristics

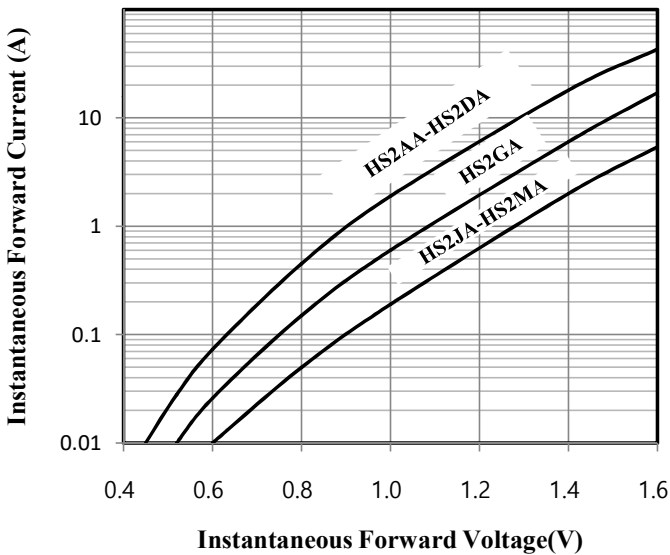


Fig.4 Typical Junction Capacitance

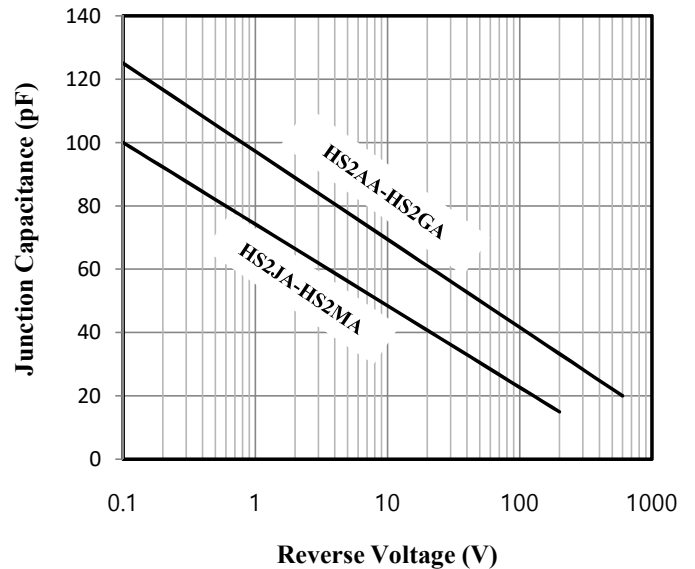


Fig.5 Typical Reverse Characteristics

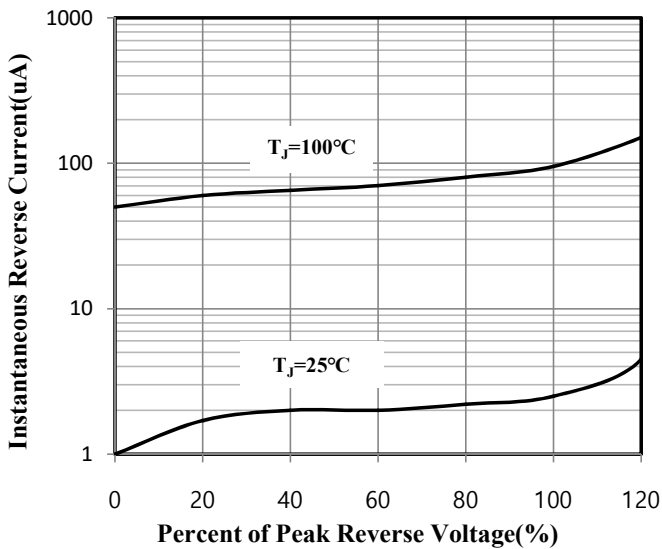


Fig. 6 Reverse Recovery Time Characteristic and Test Circuit Diagram

