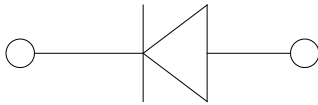
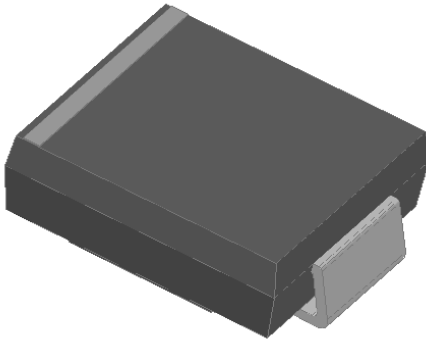




## Surface Mount High Efficient Rectifier



### Features

- High current capability
- High Reliability
- High surge current capability
- Solder dip 260 °C max. 10 s, per JESD 22-B106

### Mechanical Data

- **Package:** DO-214AB (SMC)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

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

PARAMETER	SYMBOL	UNIT	HS3A	HS3B	HS3D	HS3F	HS3G	HS3J	HS3K	HS3M
Device marking code			HS3A	HS3B	HS3D	HS3F	HS3G	HS3J	HS3K	HS3M
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	300	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, T <sub>a</sub> (FIG.1)	I <sub>O</sub>	A	3.0							
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	100							
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	HS3A	HS3B	HS3D	HS3F	HS3G	HS3J	HS3K	HS3M
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =3.0A	1.0			1.3		1.7		
Maximum reverse recovery time	T <sub>RR</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A I <sub>rr</sub> =0.25A	50					75		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>a</sub> =25°C	10							
			T <sub>a</sub> =100°C	200							

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

PARAMETER	SYMBOL	UNIT	HS3A	HS3B	HS3D	HS3G	HS3J	HS3K	HS3M	
Thermal Resistance	Junction to ambient	R <sub>θJ-A</sub>	50 <sup>(1)</sup>							
	Junction to lead	R <sub>θJ-L</sub>	15							

Note(1)

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8 mm x 8 mm) copper pad areas



# HS3A THRU HS3M

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HS3A-HS3M	F1	Approximate 0.248	3000	6000	42000	13" reel

## Characteristics(Typical)

FIG.1: I<sub>o</sub>-T<sub>L</sub> Curve

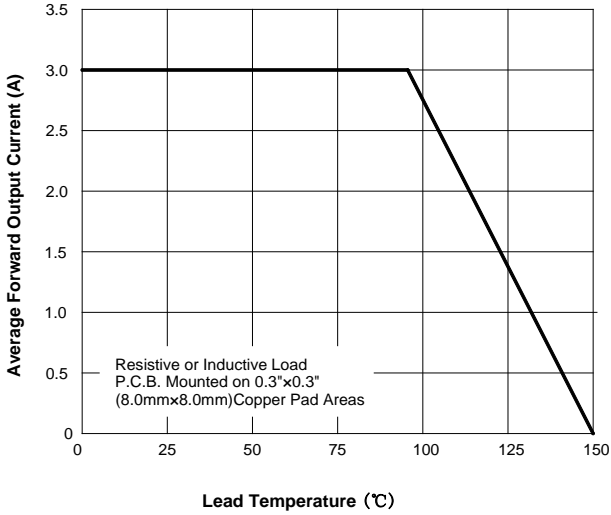


FIG.2: Forward Surge Current Capability

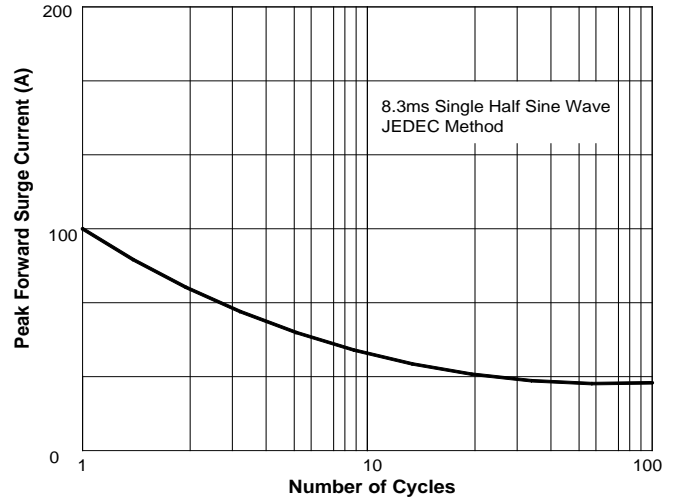


FIG.3: Forward Voltage

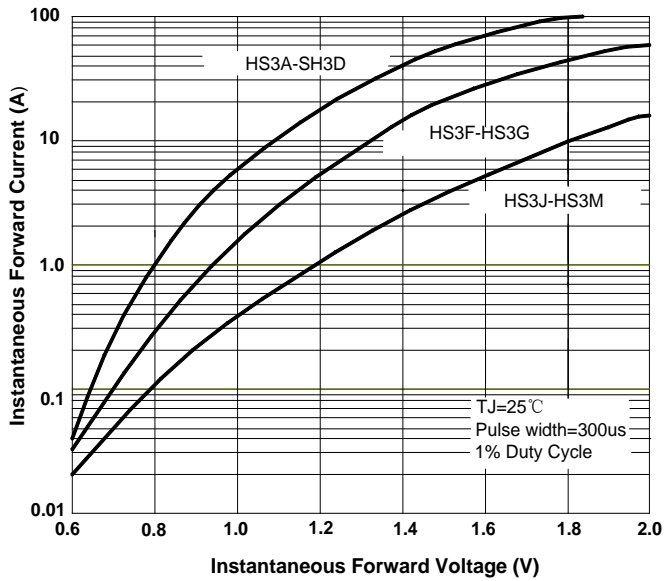


FIG.4: Typical Rrverse Characteristics

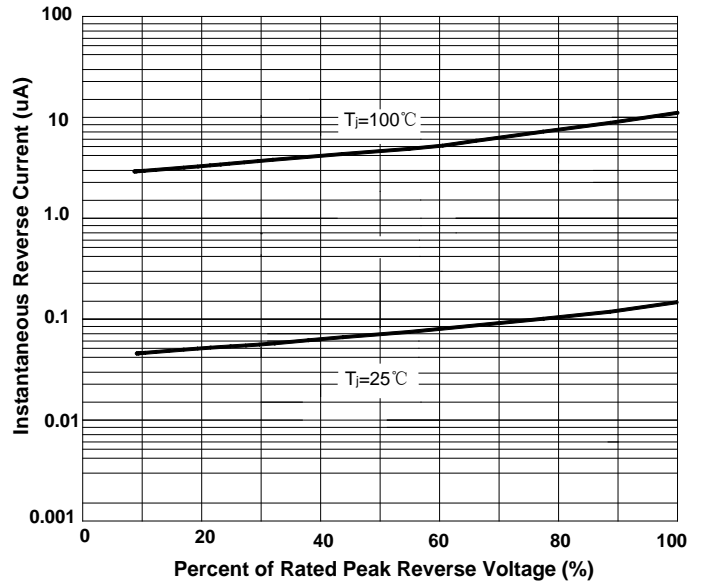
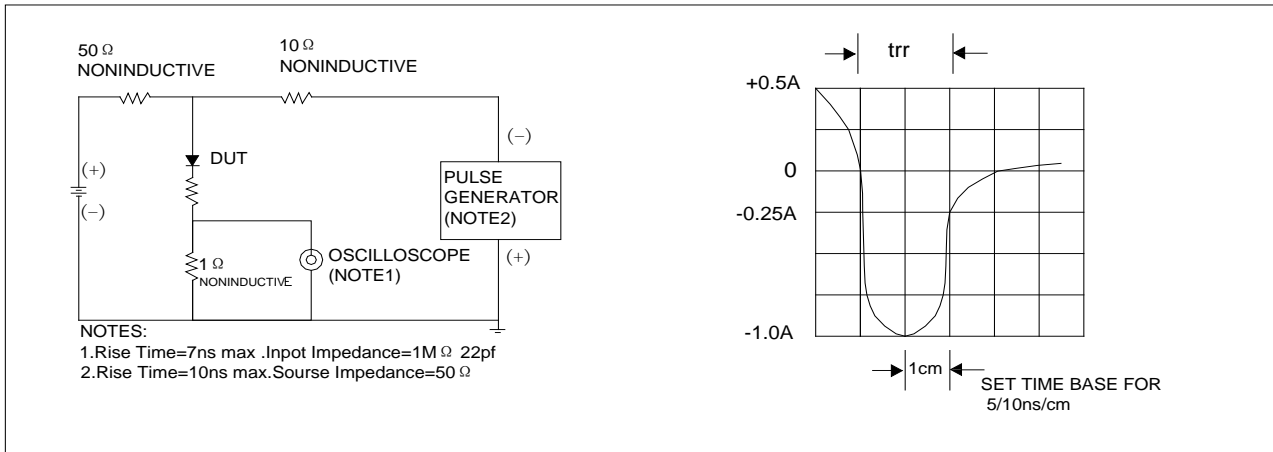
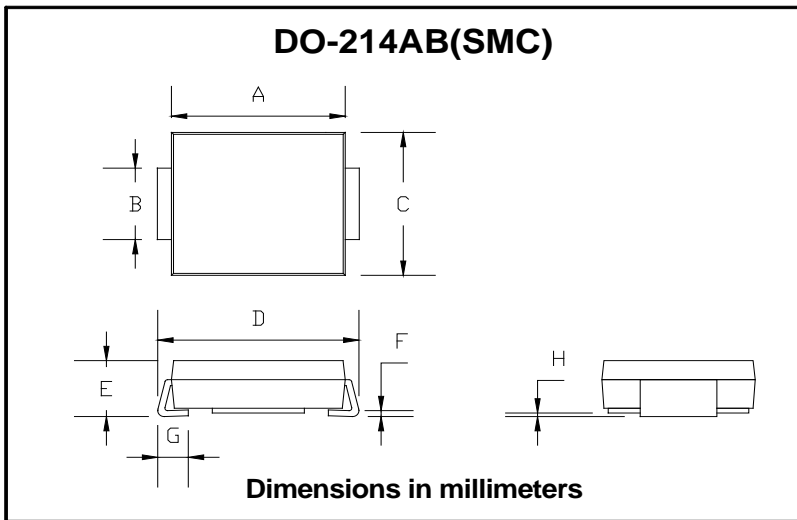


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

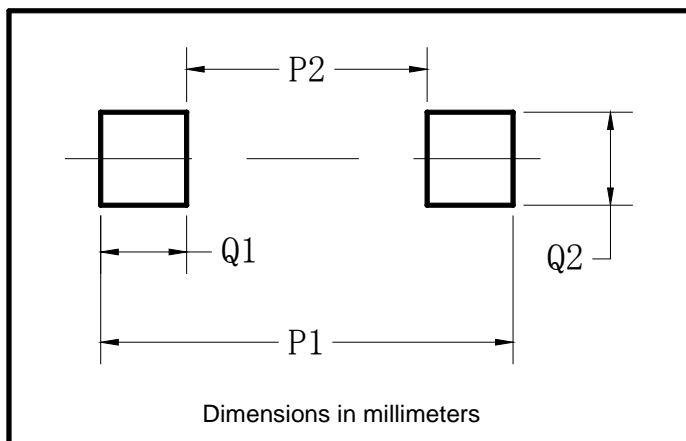


## Outline Dimensions



DO-214AB (SMC)		
Dim	Min	Max
A	6.60	7.11
B	2.85	3.27
C	5.59	6.22
D	7.75	8.13
E	1.99	2.61
F	0.15	0.31
G	0.76	1.52
H	0.10	0.20

## Suggested pad layout



Dim	Min
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82



## HS3A THRU HS3M

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### Disclaimer

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