

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_a=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 _{RRM}	V	50	100	200	300	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1)	I _o	A	3.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	100							
Storage Temperature	T _{stg}	°C	-55 ~+150							
Junction Temperature	T _j	°C	-55 ~+150							

ELECTRICAL CHARACTERISTICS (T_a=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 _F	V	I _{FM} =3.0A	1.0			1.3		1.7			
Maximum reverse recovery time	T _{RR}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	50					75			
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	µA	T _a =25°C	5								
			T _a =125°C	100								
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	40					30			

THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HS3A	HS3B	HS3D	HS3F	HS3G	HS3J	HS3K	HS3M
Thermal Resistance	Junction to ambient	R _{θJ-A}	48 ⁽¹⁾							
	Junction to lead	R _{θJ-L}	13 ⁽¹⁾							

Note(1)

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x16 mm) copper pad areas

PACKAGING INFORMATION

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

CHARACTERISTICS (Typical)

FIG.1: I_o-T_L Curve

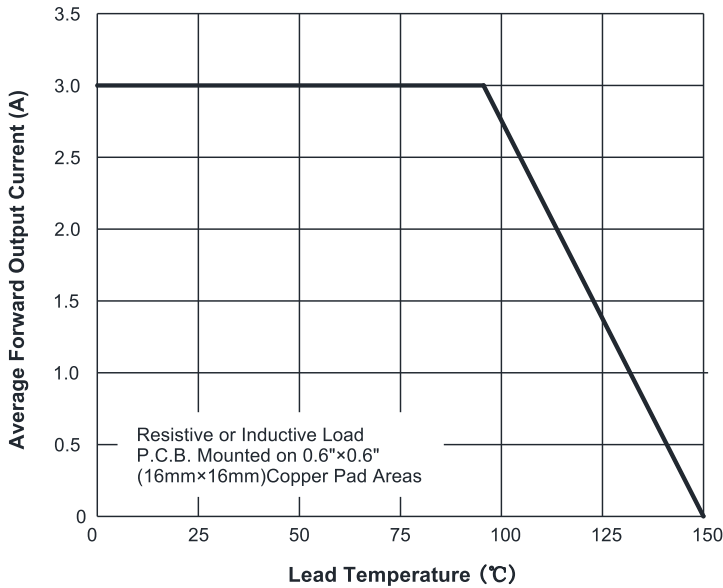


FIG.2: Forward Surge Current Capability

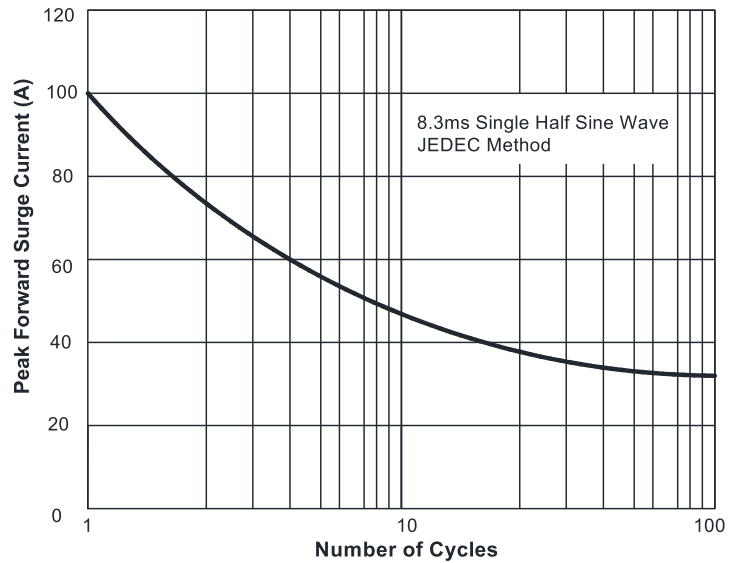


FIG.3: Forward Voltage

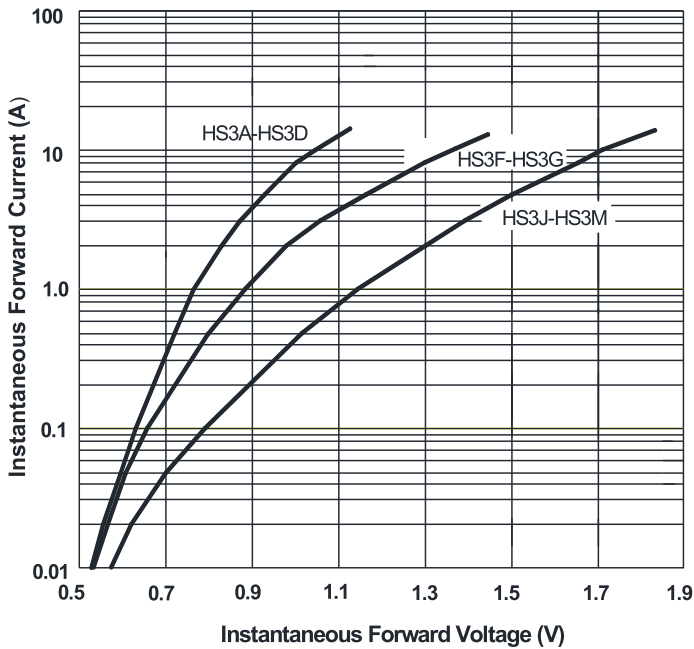


FIG.4: Typical Reverse Characteristics

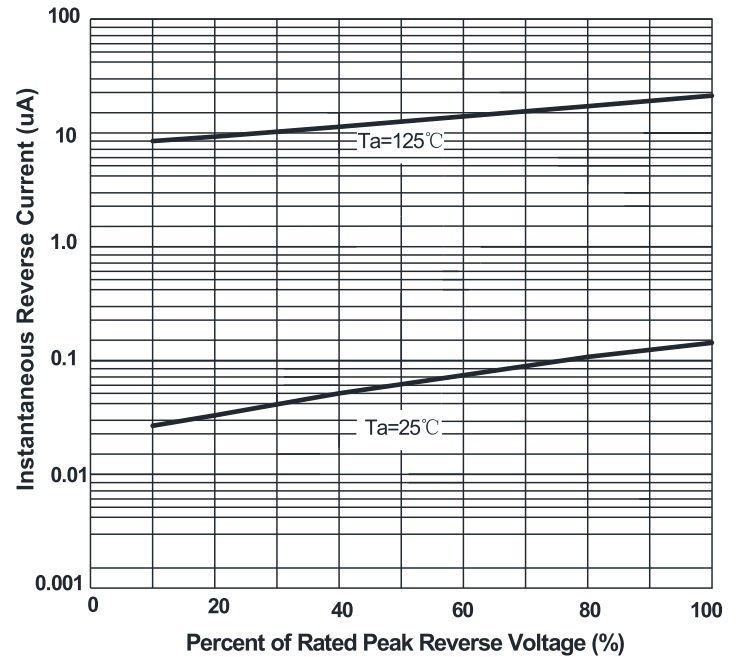
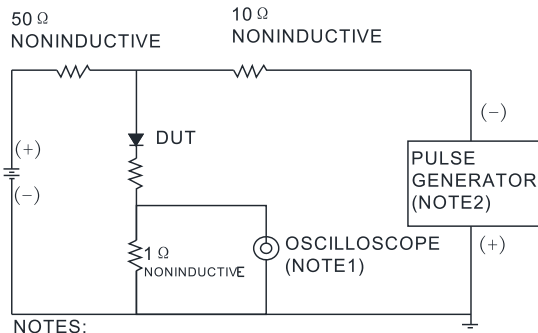
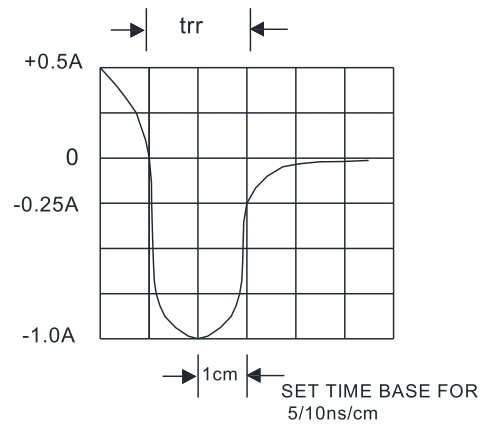


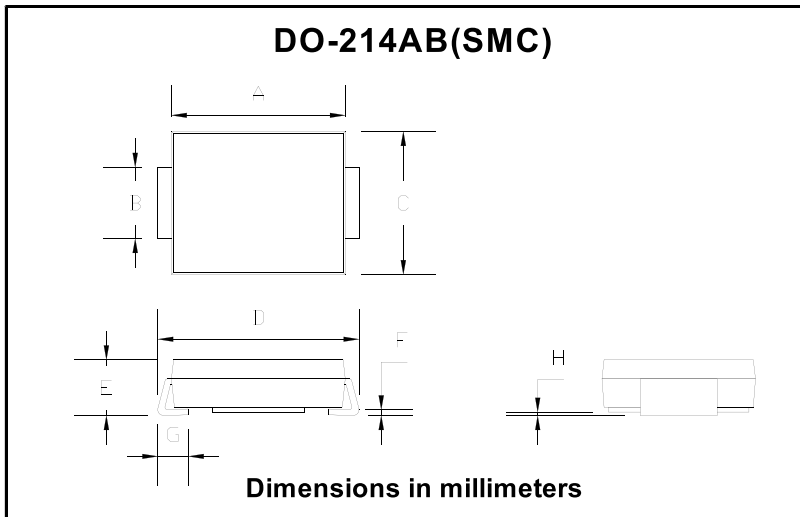
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



NOTES:
1. Rise Time=7ns max .Input Impedance=1MΩ 22pf
2. Rise Time=10ns max. Source Impedance=50Ω

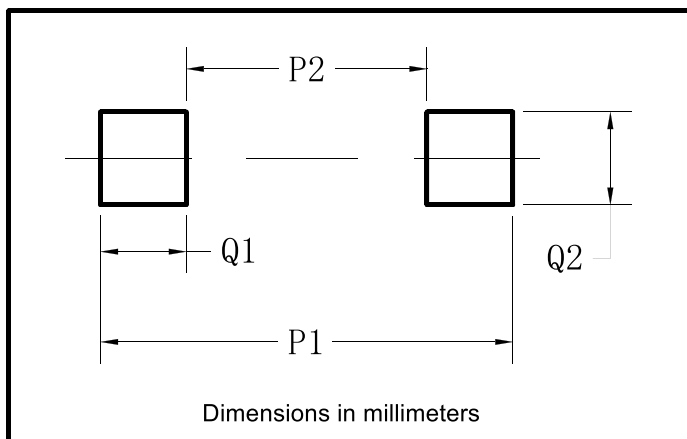


OUTLINE DIMENSIONS



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	Typ
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82