

■ FEATURES

- High current capability
- High reliability
- High surge current capability
- Low power loss
- 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	GR3A	GR3B	GR3D	GR3G	GR3J	GR3K	GR3M
Device marking code			GR3A	GR3B	GR3D	GR3G	GR3J	GR3K	GR3M
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	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	GR3A	GR3B	GR3D	GR3G	GR3J	GR3K	GR3M
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	1.3						
Maximum reverse recovery time	T _{RR}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	150			250		500	
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.	35						

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

PARAMETER	SYMBOL	UNIT	GR3A	GR3B	GR3D	GR3G	GR3J	GR3K	GR3M
Thermal Resistance	Junction to ambient	R _{θJA}	48 ¹⁾						
	Junction to terminal	R _{θJL}	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" (16mm x 16mm) 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
GR3A~GR3M	Omit for Standard	Approximate 0.248	3000	6000	42000	13" reel

■ **CHARACTERISTICS (Typical)**

FIG.1: I_o -TL Curve

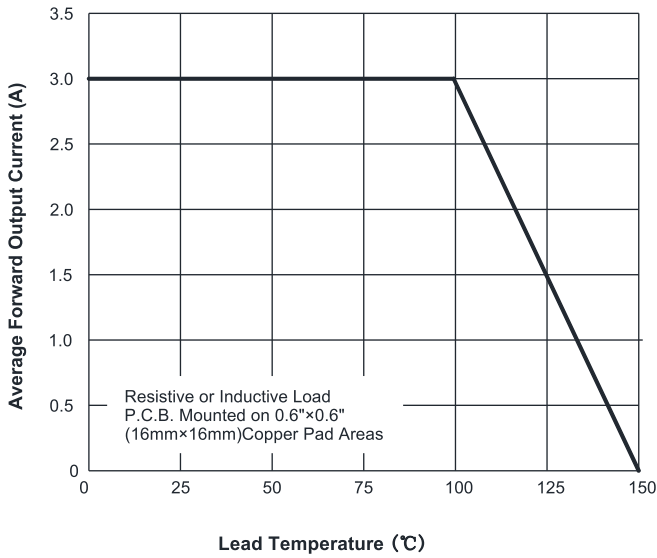


FIG.2: Forward Surge Current Capability

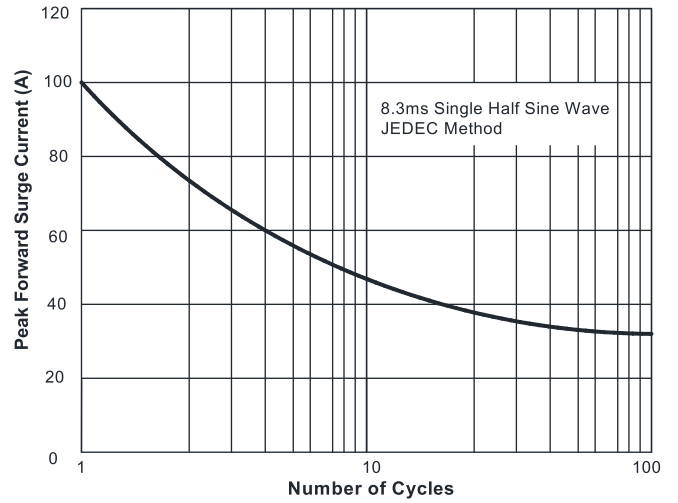


FIG.3: Forward Voltage

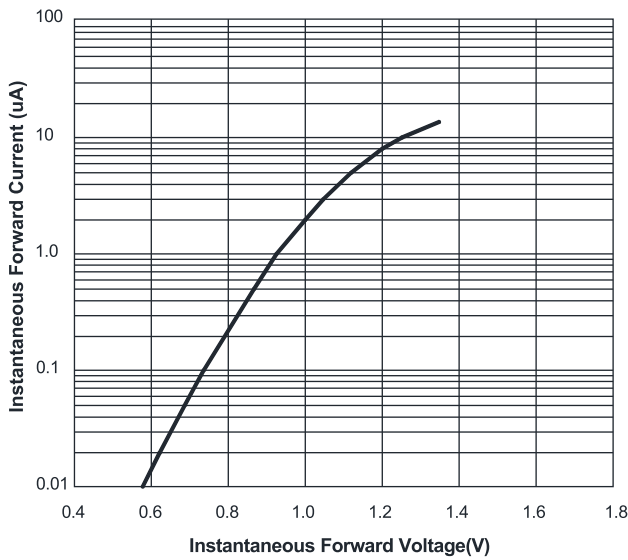


FIG.4: Typical Reverse Characteristics

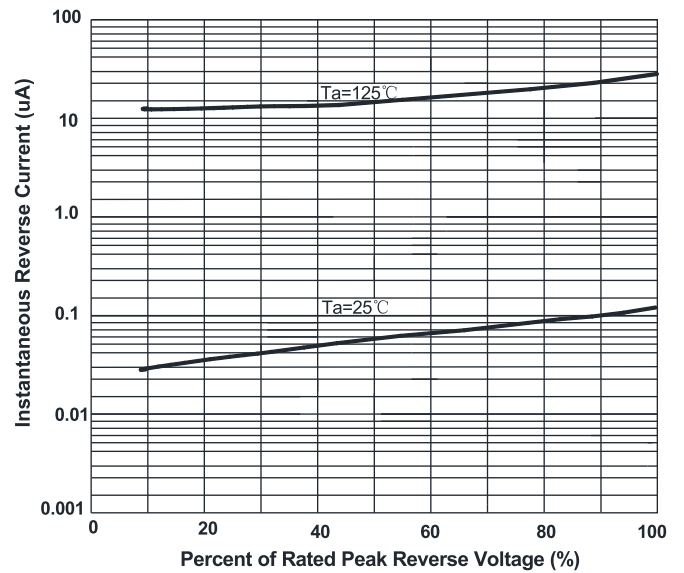
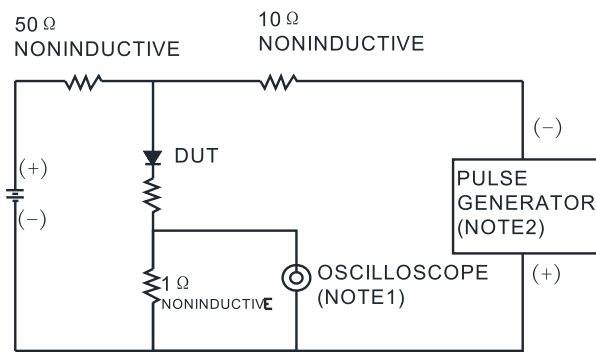
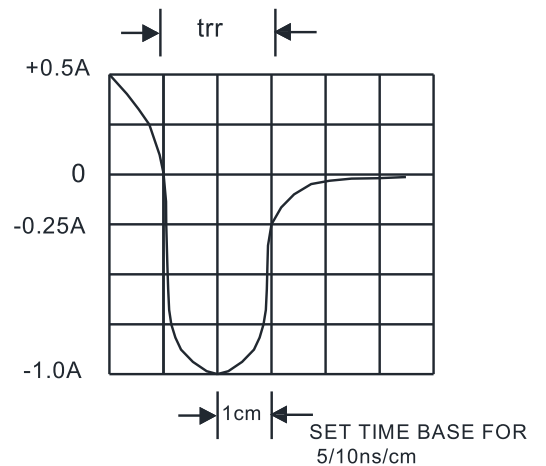


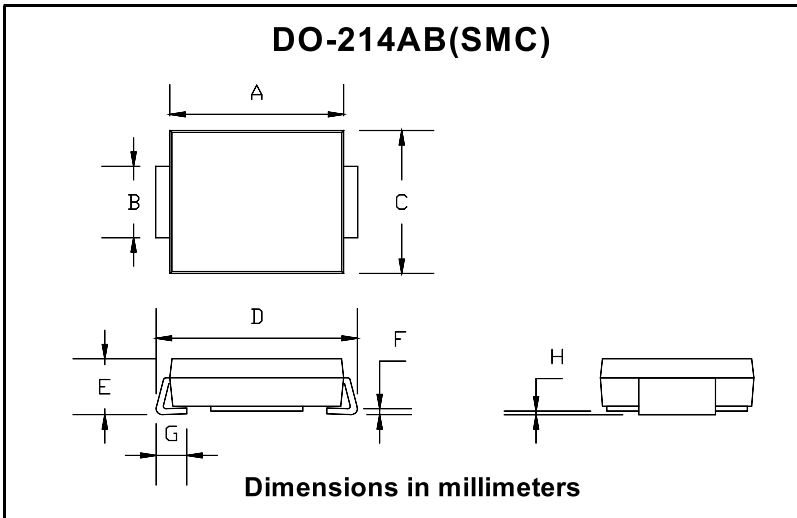
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



- NOTES:
1. Rise Time=7ns max .Inpot Impedance=1M Ω 22pf
2. Rise Time=10ns max.Source Impedance=50 Ω

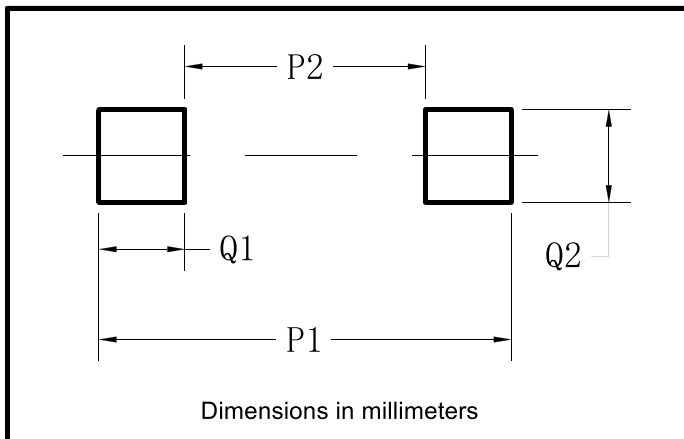


■ **OUTLINE DIMENSIONS**



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