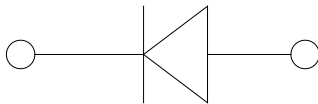
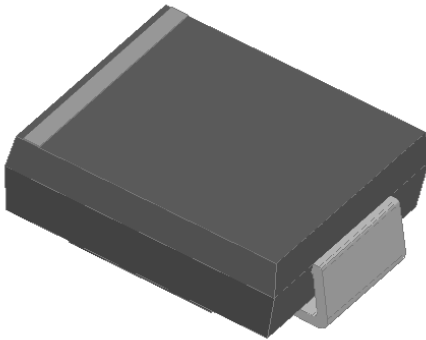




Surface Mount Fast Recovery Rectifier



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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GR5A	GR5B	GR5D	GR5G	GR5J	GR5K	GR5M
Device marking code			GR5A	GR5B	GR5D	GR5G	GR5J	GR5K	GR5M
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	I _o	A	5.0						
Surge(Non-repetitive)Forward Current @ 60Hz Half-sine wave, 1 cycle, Ta=25°C	I _{FSM}	A	120						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55 ~+150						

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GR5A	GR5B	GR5D	GR5G	GR5J	GR5K	GR5M
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =5.0A	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	Ta=25°C	10						
			Ta=100°C	250						

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GR5A	GR5B	GR5D	GR5G	GR5J	GR5K	GR5M
Thermal Resistance	Junction to ambient	R _{θJ-A}	47 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 x 16 mm) copper pad areas



GR5A THRU GR5M

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GR5A-GR5M	F1	Approximate 0.254	3000	6000	48000	13" reel

Characteristics(Typical)

FIG.1: Io-TL Curve

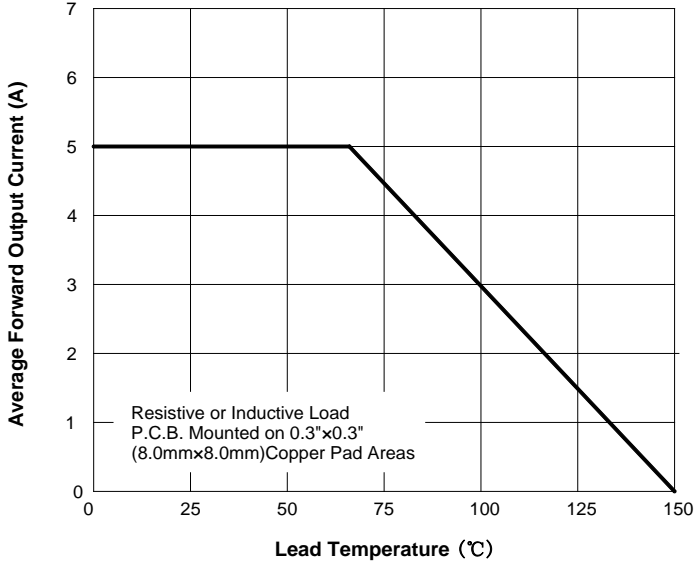


FIG.2: Forward Surge Current Capability

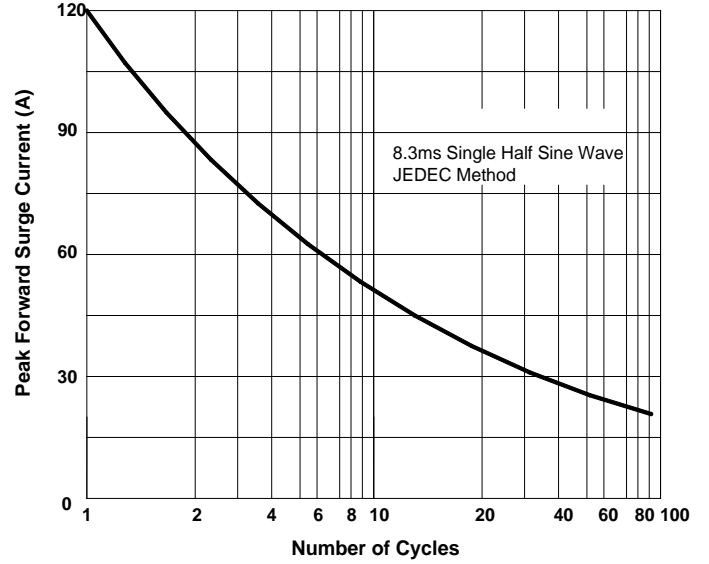


FIG.3: Forward Voltage

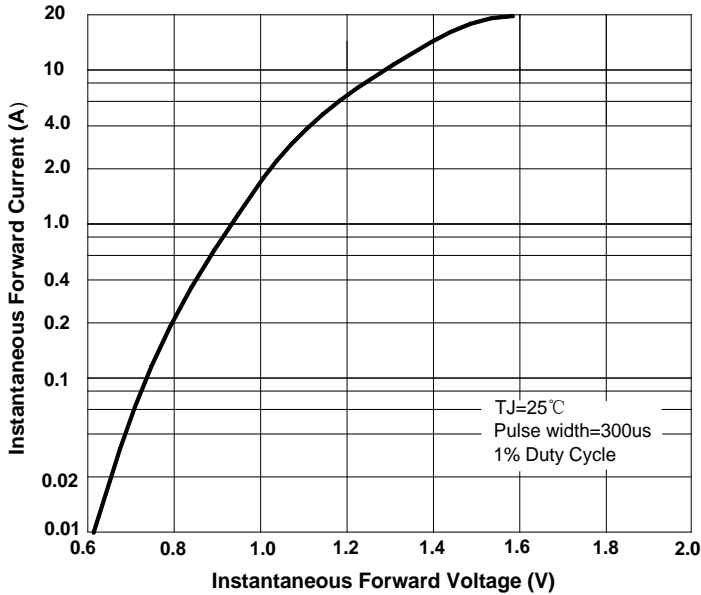


FIG.4: Typical Reverse Characteristics

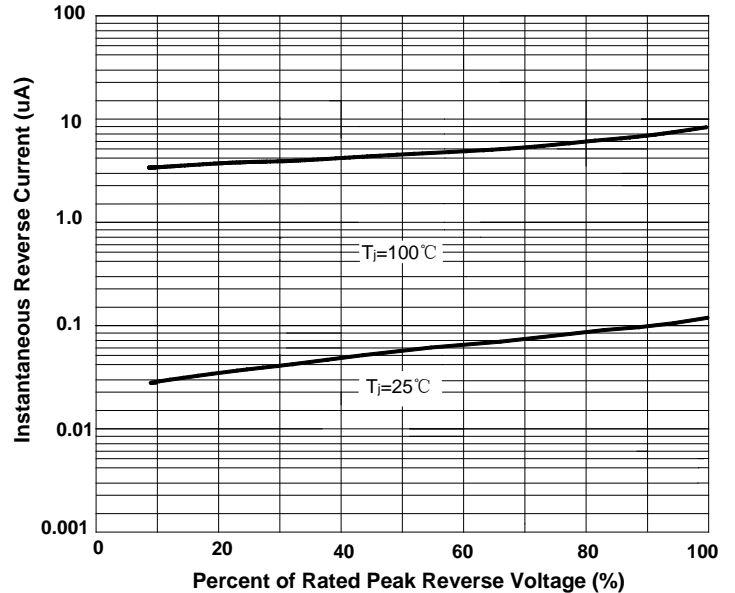
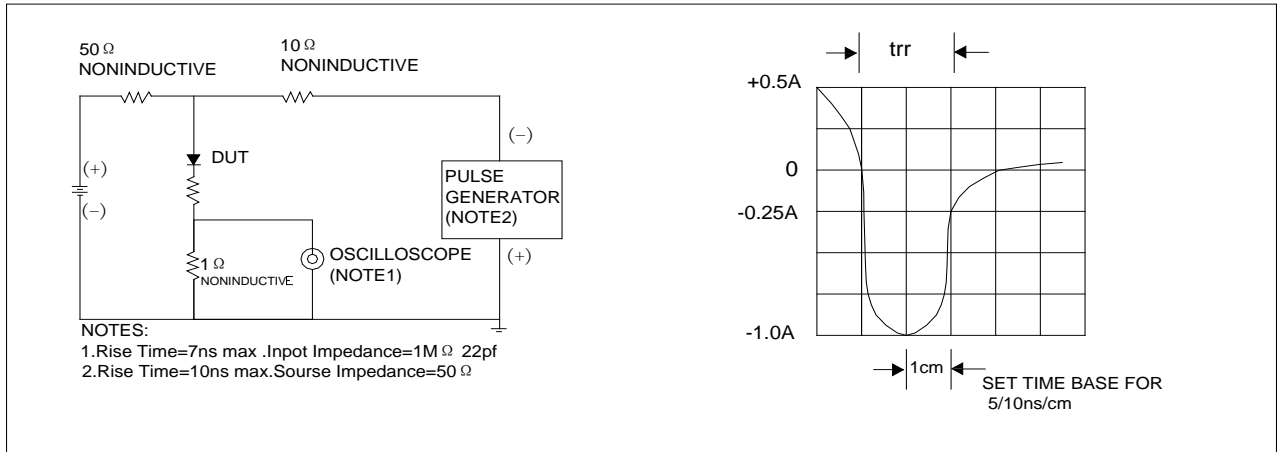
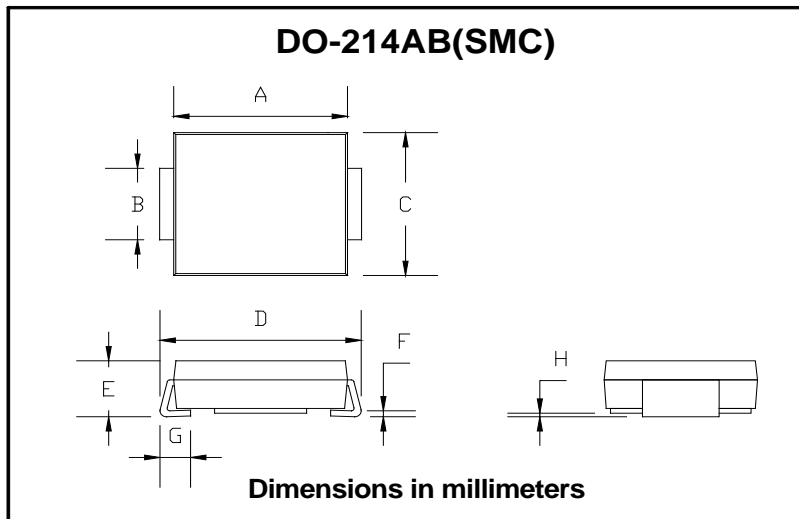


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

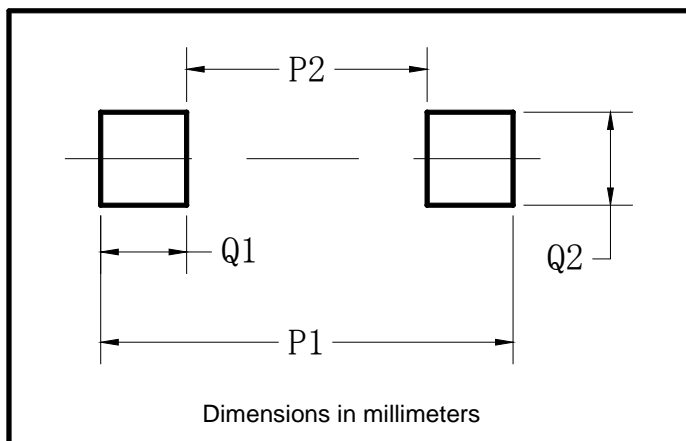


■ Outline Dimensions



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



GR5A THRU GR5M

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