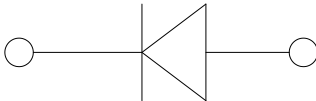
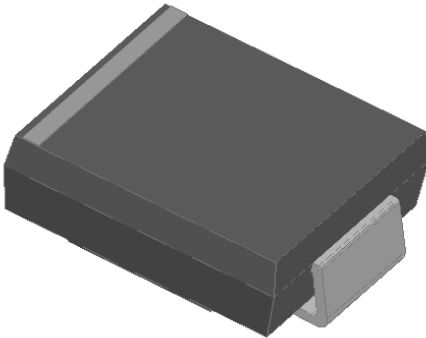


Surface Mount Fast Recovery Rectifier



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						
Forward Surge Current (Non-repetitive) @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						
Typical junction capacitance	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	40						



GR5A THRU GR5M

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

PARAMETER		SYMBOL	UNIT	GR5A	GR5B	GR5D	GR5G	GR5J	GR5K	GR5M
Thermal Resistance	Junction to ambient	$R_{\theta J-A}$	°C/W	47 ⁽¹⁾						
	Junction to lead	$R_{\theta J-L}$		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

■ 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	42000	13" reel

■ Characteristics (Typical)

FIG.1: Io-TL Curve

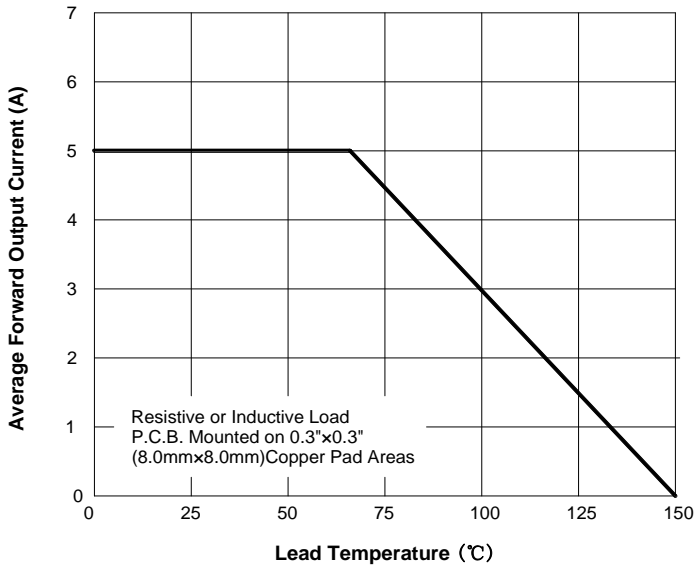


FIG.2: Forward Surge Current Capability

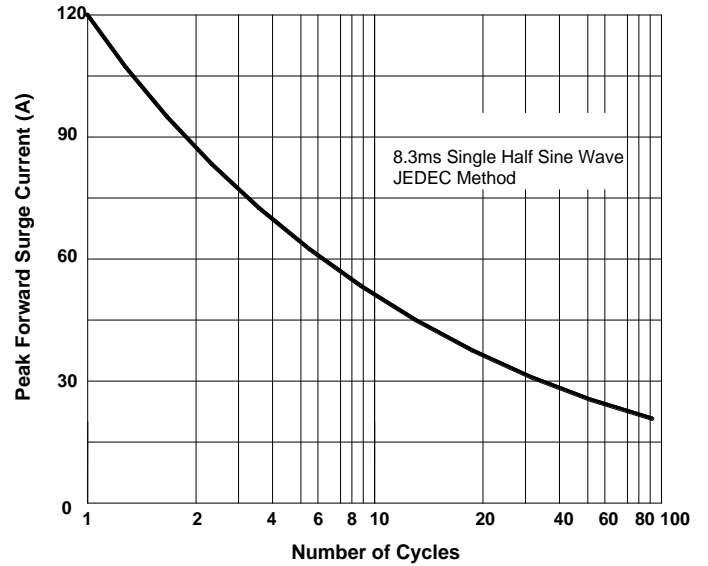


FIG.3: Forward Voltage

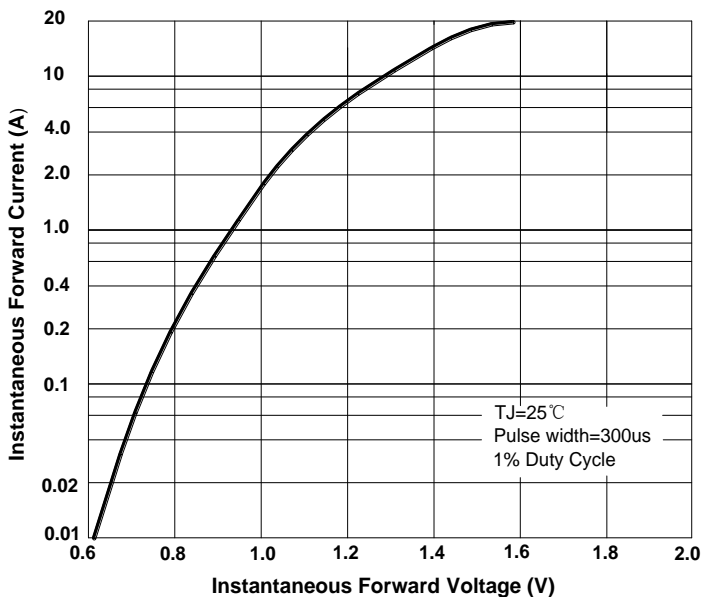
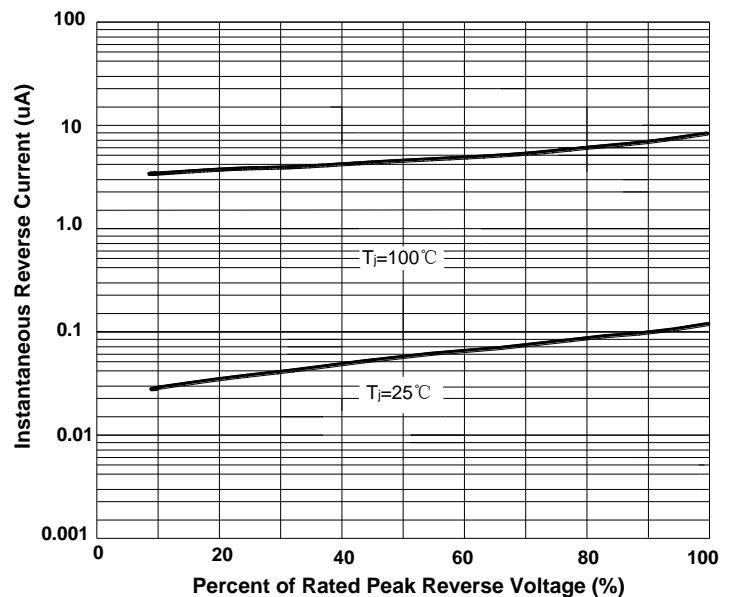


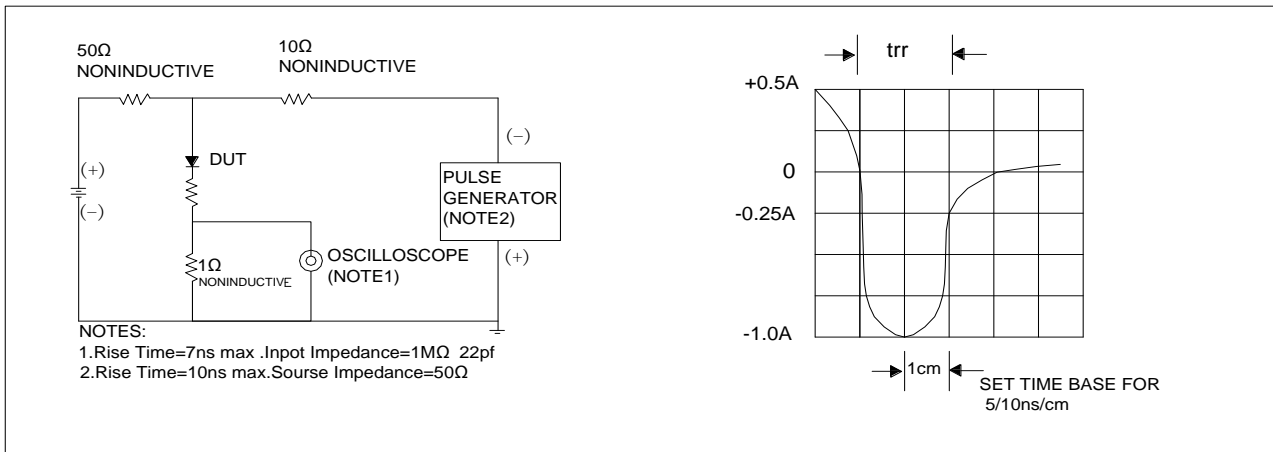
FIG.4: Typical Reverse Characteristics



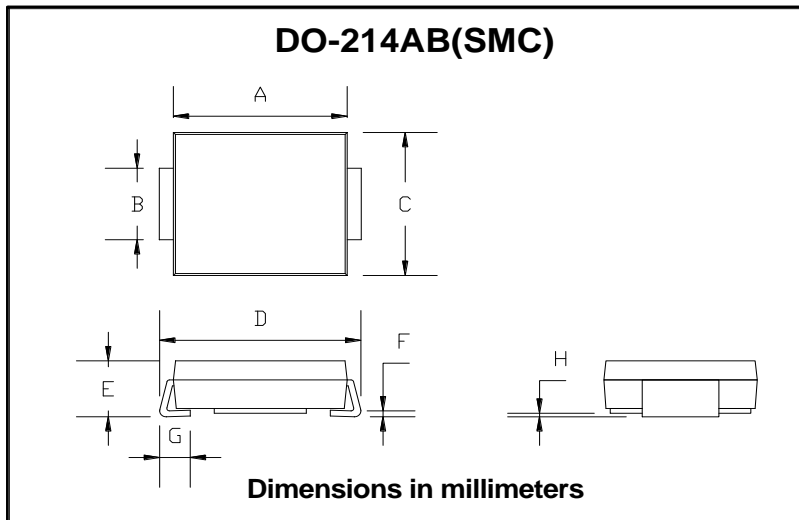


GR5A THRU GR5M

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

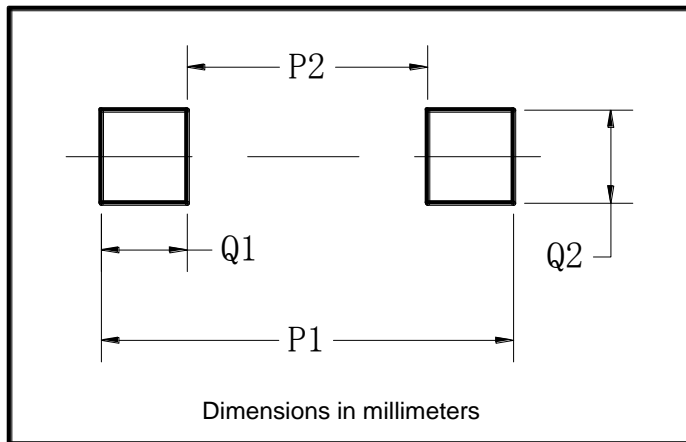


■ Outline Dimensions



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



DO-214AB (SMC)	
Dim	Min
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82



GR5A THRU GR5M

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Diodes - General Purpose, Power, Switching category](#):

Click to view products by [Yangjie manufacturer](#):

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [RD0506LS-SB-1H](#) [RGP30G-E373](#) [DSE010-TR-E](#) [BAQ333-TR](#) [BAQ335-TR](#) [BAQ33-GS18](#) [BAS1602VH6327XT](#) [BAV17-TR](#) [BAV19-TR](#) [BAV301-TR](#) [BAW27-TAP](#) [HSC285TRF-E](#) [NSVBAV23CLT1G](#) [NTE525](#) [1SS181-TP](#) [1SS184-TP](#) [1SS193,LF](#) [1SS193-TP](#) [1SS400CST2RA](#) [SBAV99LT3G](#) [SDAA13](#) [LL4448-GS18](#) [SHN2D02FUTW1T1G](#) [LS4150GS18](#) [LS4151GS08](#) [SMMD7000LT3G](#) [FC903-TR-E](#) [1N4449](#) [1N4934-E3/73](#) [1SS226-TP](#) [APT100DL60HJ](#) [RFUH20TB3S](#) [RGP30G-E354](#) [RGP30M-E3/73](#) [D291S45T](#) [MCL4151-TR](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAS33-TAP](#) [BAS 70-02V H6327](#) [BAV300-TR](#) [BAV303-TR3](#) [BAW27-TR](#) [BAW56DWQ-7-F](#) [BAW56M3T5G](#) [BAW75-TAP](#)