

2A,50-1000V Fast Recovery Rectifiers

Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



DO-15(DO-204AC)

Applications

- Small battery charger, Power supplies

Maximum Ratings & Electrical Characteristics (T _A =25°C unless otherwise noted)									
Parameter	Symbol	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	2							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	55							A
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

Thermal-Mechanical Specifications (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Typ	Unit
Thermal Resistance, Junction to Ambient	R _{θJA}	65	°C / W
Thermal Resistance, Junction to Case	R _{θJC}	30	°C / W
Thermal Resistance, Junction to Lead	R _{θJL}	26	°C / W



FR201G thru FR207G

GOOD-ARK Electronics

Electrical Specifications ($T_A=25^{\circ}\text{C}$ unless otherwise noted)											
Parameter	Symbol	Test Conditions	FR201G	FR202G	FR203G	FR204G	FR205G	FR206G	FR207G	Unit	
Forward Drop Voltage	V_F	$I_F=2\text{A}$	1.30								V
Reverse leakage current @ V_R	I_R	$T_J=25^{\circ}\text{C}$	5								uA
		$T_J=125^{\circ}\text{C}$	100								
Typical junction capacitance	C_J	4.0 V 1 MHz	25								pF
Maximum reverse recovery time	t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$		150			250		500	nS	

Note:

1. Valid provided that leads at a distance of 9.5 mm from case are kept at ambient temperature.

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

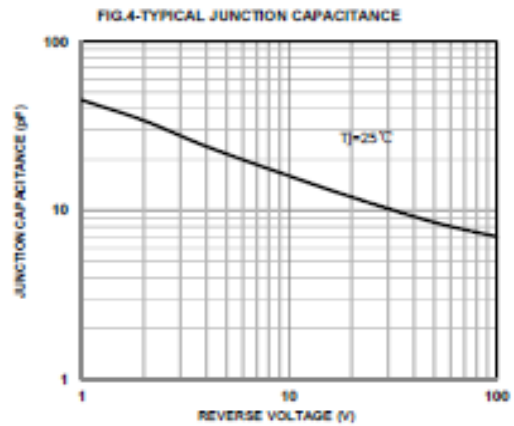
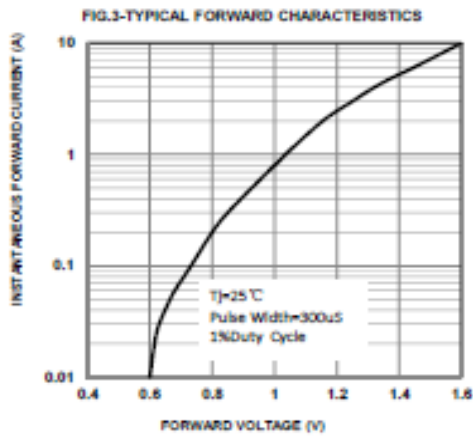
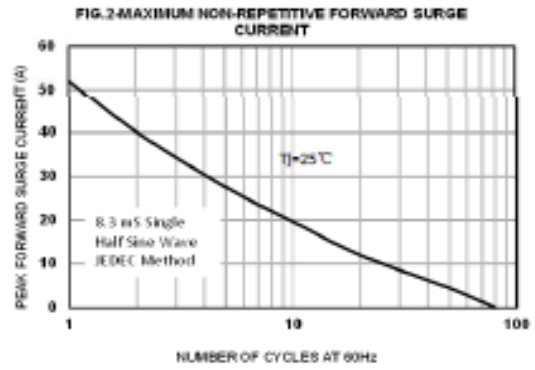
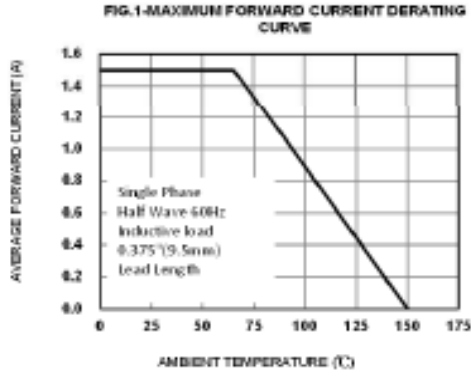
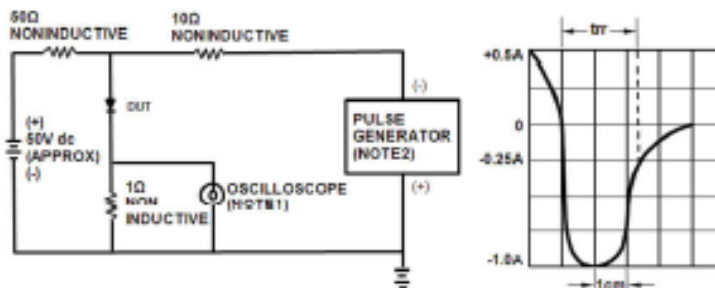


FIG.5 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



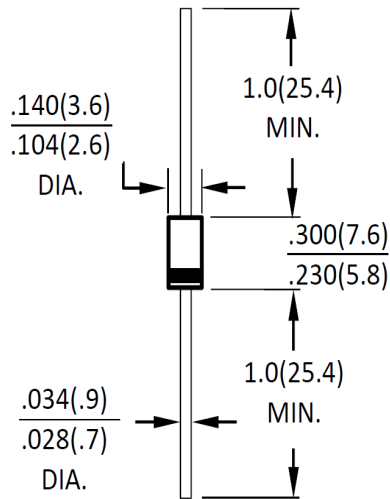
NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Source Impedance= 50 ohms

SET TIME BASE FOR 5/10ns/cm

Package Outline Dimensions

in inches (millimeters)

DO-15(DO-204AC)



Dimensions in inches and (millimeters)

Revision History

Document Version	Date of release	Description of changes
Rev.A	2021.06.01	Released Datasheet
Rev.B	2023.11.13	Modify document format

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