



ROBERT STĘPIEŃ
HURTOWNIA CZĘŚCI ELEKTRONICZNYCH
podzespoly-elektroniczne.pl

Dioda FR306 3A 800V 500ns DO-201AD



Dane techniczne:

Nazwa: FR306

Typ: dioda szybka

Napięcie wsteczne maksymalne: 800V

Napięcie przewodzenia maksymalne: 1,3V

Prąd przewodzenia: 3A

Prąd w impulsie maksymalny: 125A

Czas gotowości: 500ns

Obudowa: DO-201AD

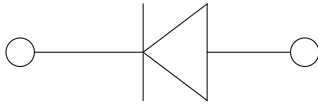
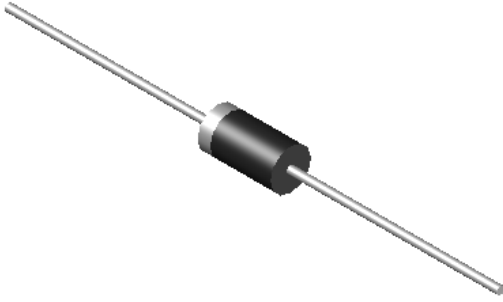
Montaż: przewlekany(THT)

www.podzespoly-elektroniczne.pl

Robert Stępień Hurtownia Części Elektronicznych; Adres: ul. Wolumen 2, pawilon 71; 01-912 Warszawa; tel.: 601 296 402 /
sklep@podzespoly-elektroniczne.pl



Fast Recovery Rectifier



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Mechanical Data

- **Package:** DO-201AD(DO-27)
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	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Device marking code			FR301	FR302	FR303	FR304G	FR305	FR306	FR307
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T _a =50°C	I _{F(AV)}	A	3.0						
Forward Surge Current(Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	125						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55~+125						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =3.0A	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	μA	T _a =25°C	2.5						
	I _{RRM2}		T _a =100°C	100						
Reverse Recovery time	t _{rr}	ns	I _F =0.5A I _R =1A I _{RR} =0.25A	150				250	500	
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	55						

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

PARAMETER	SYMBOL	UNIT	FR301	FR302	FR303	FR304	FR305	FR306	FR307
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	20						



FR301 THRU FR307

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR301~FR307	D1	Approximate 1.05	1250	1250	12500	Tape
FR301~FR307	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics (Typical)

FIG.1: I_o - T_a Curve

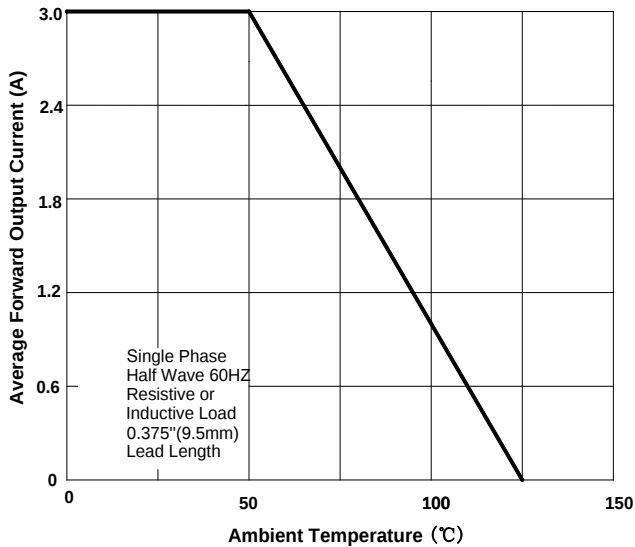


FIG.2: Forward Surge Current Capability

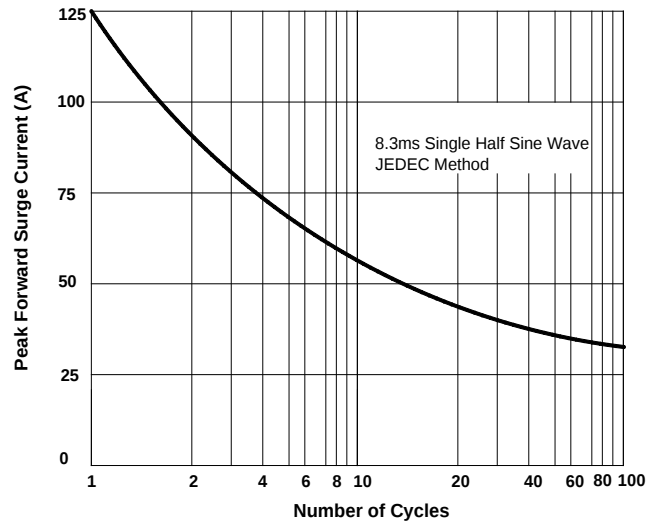


FIG.3: Forward Voltage

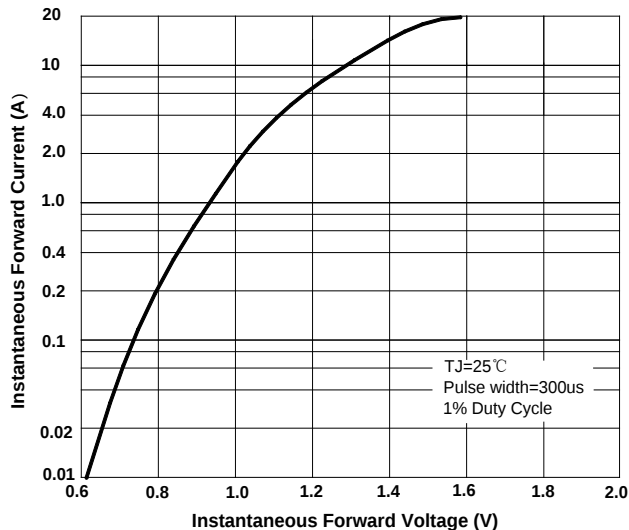
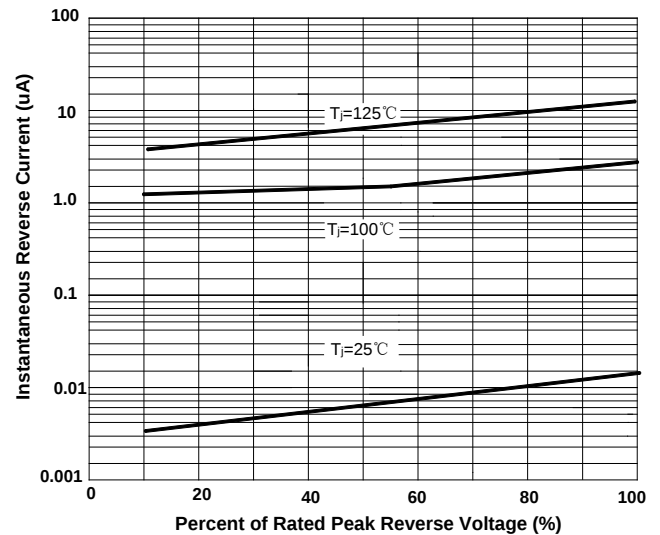


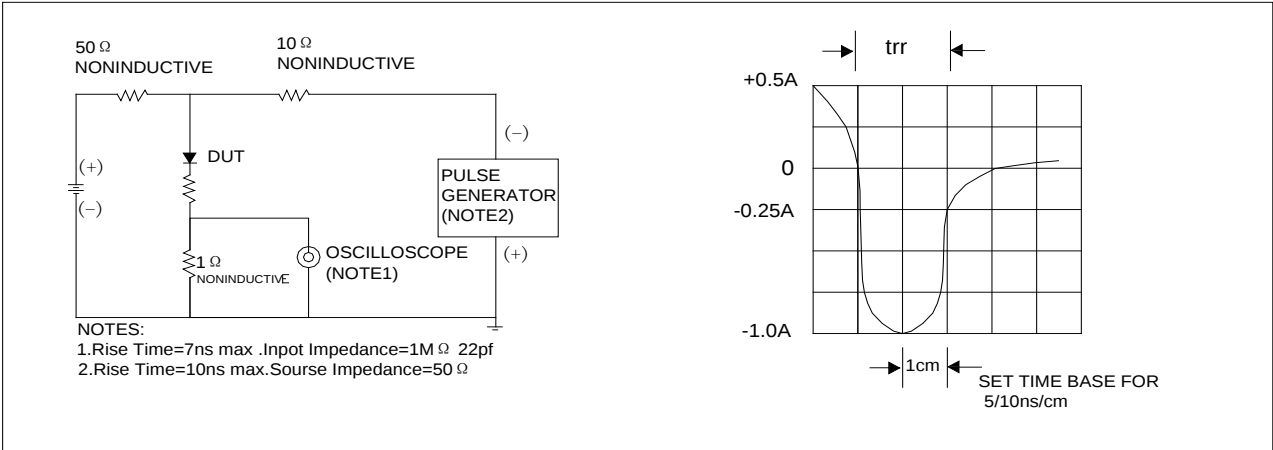
FIG.4: Typical Reverse Characteristics



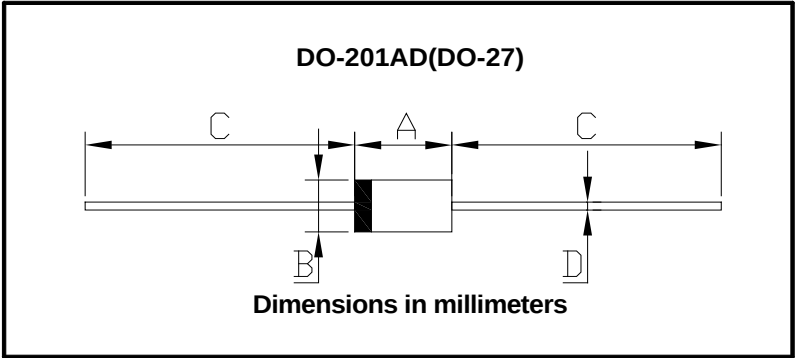


FR301 THRU FR307

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



■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



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.