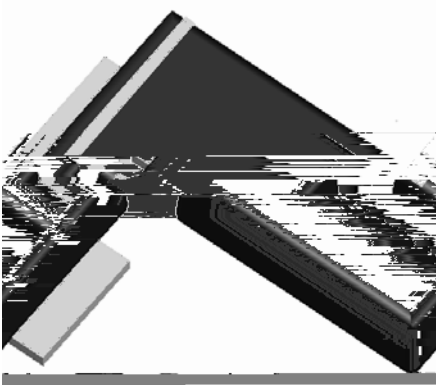


Surface Mount Super Fast Recovery Rectifier

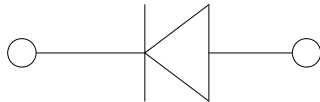


Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Super Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication.



Mechanical Data

- **Package:** SMBF
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■Maximum Ratings (T_a=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	UG3ABF	UG3BBF	UG3CBF	UG3DBF	UG3FBF	UG3GBF	UG3HBF	UG3JBF
Device marking code			UG3ABF	UG3BBF	UG3CBF	UG3DBF	UG3FBF	UG3GBF	UG3HBF	UG3JBF
Maxi	=	'	50	100	150	200	300	400	500	600

Average rectified output current @60Hz sine wave, resistance load, TL (Fig.1)	IO	A	3.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	IFSM	A	100							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			200							
Current squared time @1ms≤t≤8.3ms Tj=25 Rating of per diode	I²t	A²s	41.5							
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	65				58		55	
Storage temperature	Tstg		-55 ~ +150							
Junction temperature	Tj		-55 ~ +150							



UG3ABF THRU UG3JBF

■Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL
-----------	--------

T_a



UG3ABF THRU UG3JBF

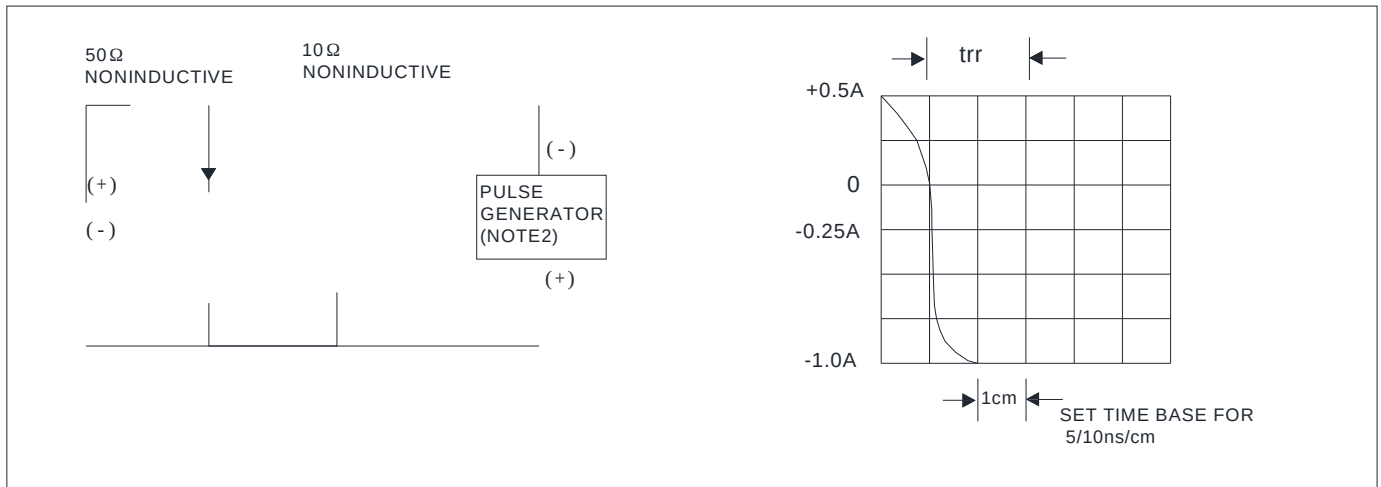
■ Thermal Characteristics $T_a=25$ Unless otherwise specified i

▼ E ω U



UG3ABF THRU UG3JBF

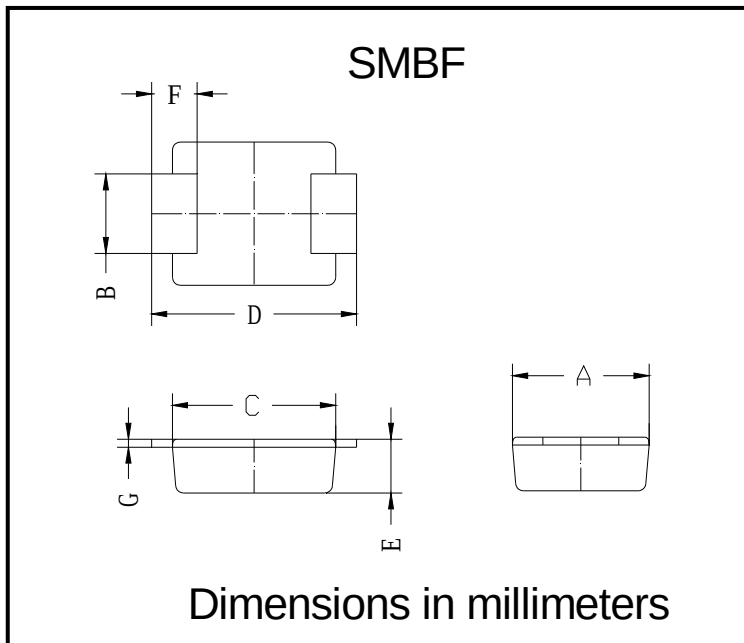
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
UG3ABF - UG3JBF	F1	Approximate 0.065	5000	/	80000	13" reel

■ Outline Dimensions



SMBF		
Dim	Min	Max
A	3.40	3.80
B	1.90	2.10
C	4.15	4.45
D	5.10	5.60
E	1.05	1.55
F	0.70	1.35
G	0.15	0.25



UG3ABF THRU UG3JBF

Ÿ Suggested pad layout

Dim	Milimeters
P1	6.20



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