

# UTC UNISONIC TECHNOLOGIES CO., LTD

SF26G **DIODE** 

# **GLASS PASSIVATED SUPER** FAST RECOVERY RECTIFIER

#### **DESCRIPTION**

The UTC SF26G is a glass passivated super fast rectifier, it uses UTC's advanced technology to provide customers with high surge current and low forward voltage drop, etc.

### **FEATURES**

- \* Low forward voltage drop
- \* High surge current capability
- \* High current capability
- \* High reliability

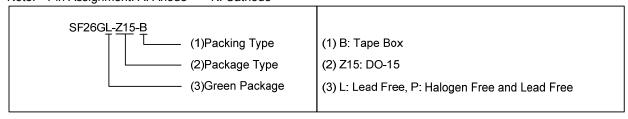
# **SYMBOL**



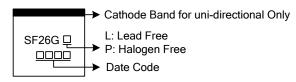
#### ORDERING INFORMATION

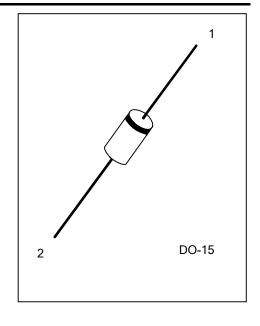
Ordering Number		Deelsese	Pin Assignment		Dooking	
Lead Free	Halogen Free	Package	1	2	Packing	
SF26GL-Z15-B	SF26GP-Z15-B	DO-15	K	Α	Tape Box	

Note: Pin Assignment: A: Anode K: Cathode



#### **MARKING**





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# ■ ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	$V_{RWM}$	400	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Reverse Voltage	$V_{RMS}$	280	V
DC Blocking Voltage	$V_R$	400	V
Average Rectified Output Current (T <sub>A</sub> =55°C)	Ιο	2.0	Α
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	50	Α
Junction Temperature	TJ	-55~+150	°C
Storage Temperature	T <sub>STG</sub>	-55~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

#### ■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT	
Junction to Ambient (Note 2)	$\theta_{JA}$	50	°C/W	

#### ■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_{FM}$	I <sub>F</sub> =2.0A			1.3	V
DC Reverse Current at Rated DC Blocking		T <sub>A</sub> =25°C			5.0	μΑ
Voltage	I <sub>RM</sub>	T <sub>A</sub> =100°C			50	μΑ
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A			35	ns
Junction Capacitance (Note 1)	CJ			30		pF

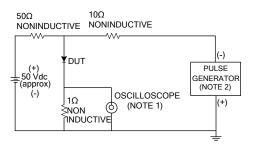
Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

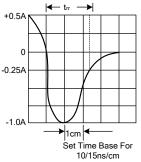
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

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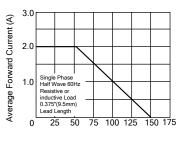
# ■ TYPICAL CHARACTERISTICS

Test Circuit Diagram And Reverse Recovery Time Characteristics



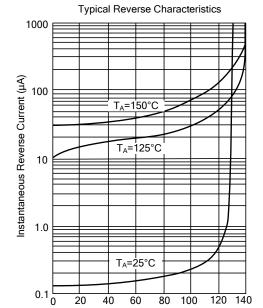


Typical Forward Current Derating Curve



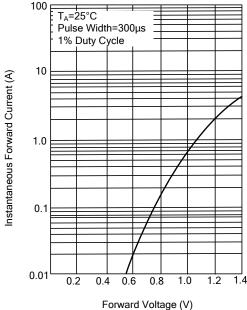
Ambient Temperature, T<sub>A</sub> (°C)

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

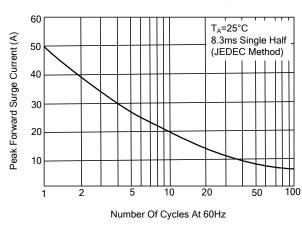


Percent Of Rated Peak Reverse Voltage (%)

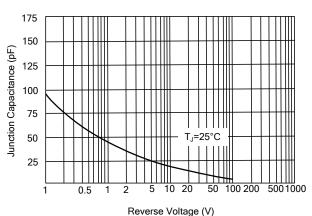
Typical Forward Characteristics



Maximum Non-Repetitive Forward Surge Current



Typical Junction Capacitance



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