

SF51G~SF58G

Features:

- Ultrafast reverse recovery time
- Low leakage current
- Low switching losses, high efficiency
- High forward surge capability
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

DO-27



1.Cathode 2, Anode

Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G
Device marking code			SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	150	200	300	400	500	600
Average Forward Current @60Hz sine wave, Resistance load, Ta =60°C	I _{F(AV)}	A	5.0							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	I _{FSM}	A	150							
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	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G
Maximum instantaneous forward voltage drop per diode	V _F	V	I _F M=5.0A	0.95			1.3			1.7	
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _a =25°C	5							
			T _a =100°C	150							
Reverse Recovery time	t _r	ns	I _F =0.5A I _R =1A I _{RR} =0.25A	35							
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	60				40			

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

PARAMETER	SYMBOL	UNIT	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G
Thermal Resistance	R _{θJ-A}	°C/W	15							

Characteristics(Typical)

FIG.1: I_o-T_a Curve

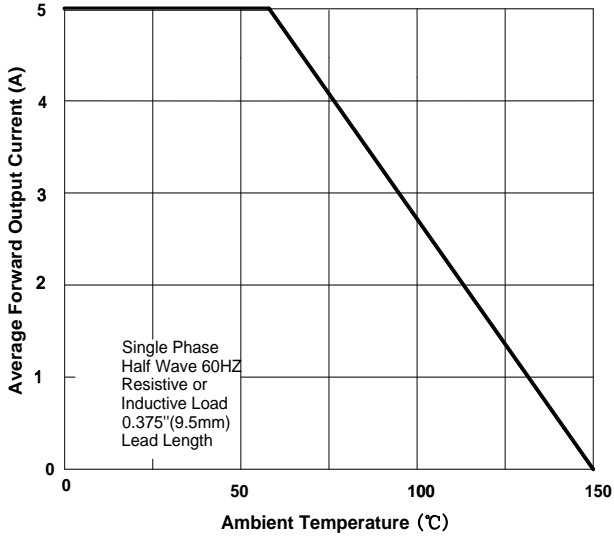


FIG.2: Forward Surge Current Capability

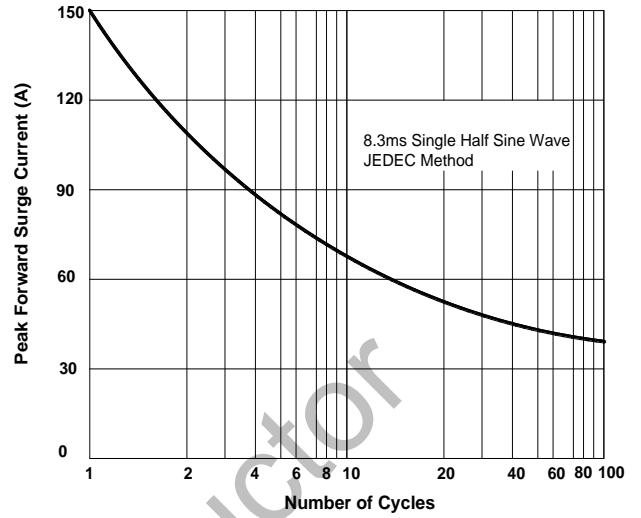


FIG.3: Forward Voltage

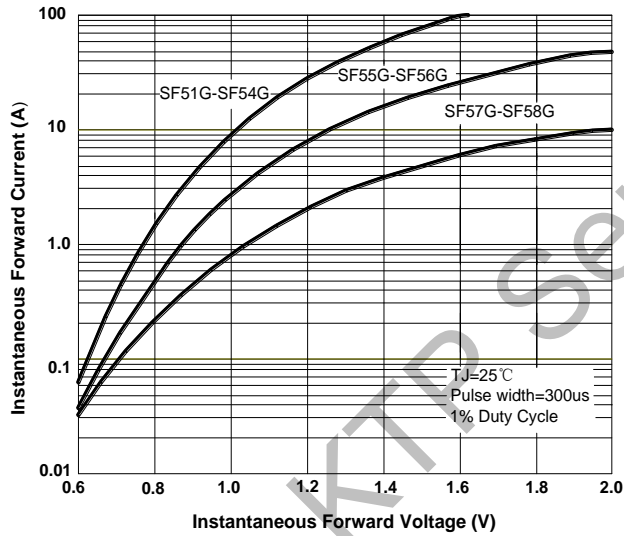
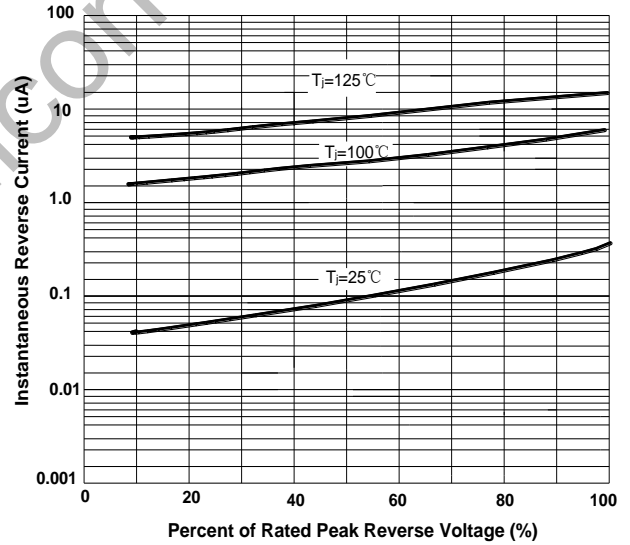


FIG.4: Typical Reverse Characteristics



Package Dimension

DO-27

Unit: mm

