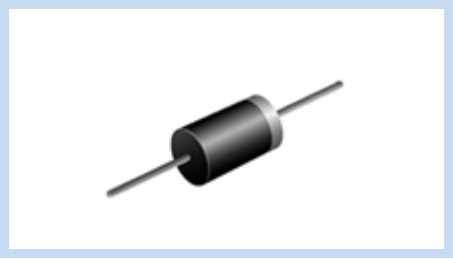
Superfast Recovery Rectifier
6A 50~600V DO-201AD

SF6xG Series

MERITEK

FEATURES



- Reverse Voltage: 50V~600V
- Forward Current: 6.0 A
- Glass Passivated Die Construction
- Hermetically Sealed
- Low Forward Voltage, High Current Capability
- Superfast Recovery Times
- Low Leakage

ELECTRICAL CHARACTERISTICS

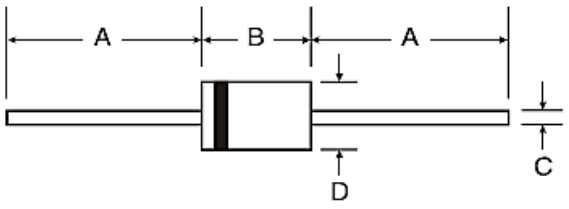
Parameter		Symbols	SF6 1G	SF6 2G	SF6 3G	SF6 4G	SF6 5G	SF6 6G	SF6 8G	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage		V_{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T_A=55°C		$I_{(AV)}$	6.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	175							Amp
Maximum Forward Voltage at 5.0A DC and 25°C		V_F	0.98				1.3		1.7	Volts
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	5.0							uAmp
	T_A=100°C	I_R	200							uAmp
Typical Junction Capacitance		C_J	120				60			pF
Typical Thermal Resistance		$R_{\theta JA}$	40							°C/W
Maximum Reverse Recovery Time		T_{RR}	35							nS
Operating and Storage Temperature Range		T_J, T_{stg}	-65 to +150							°C

Note:
1. Ratings at 25℃ ambient temperatures unless otherwise specified.
2. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC.
3. Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.
4. Reverse Recovery Test Conditions：IF=0.5A, IR=1.0A, IRR=0.25A.

DIMENSIONS

Unit: mm

Item	DO-201AD	
	Min.	Max
A	24.0	-
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1



CHARACTERISTIC CURVES

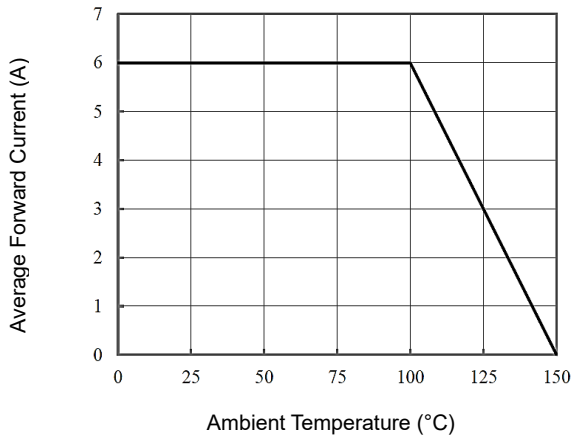


Fig1. Typical Forward Current Derating Curve

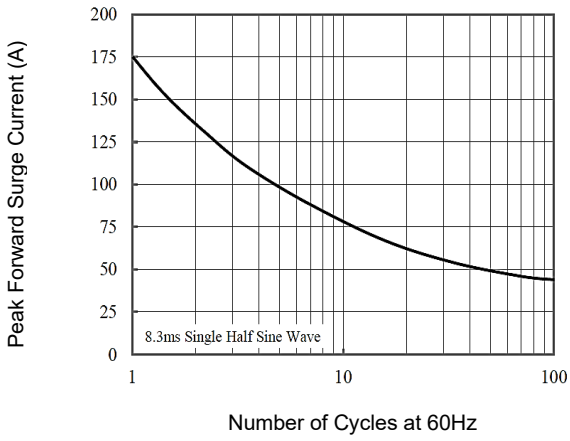


Fig2. Maximum Non-repetitive Forward Surge Current

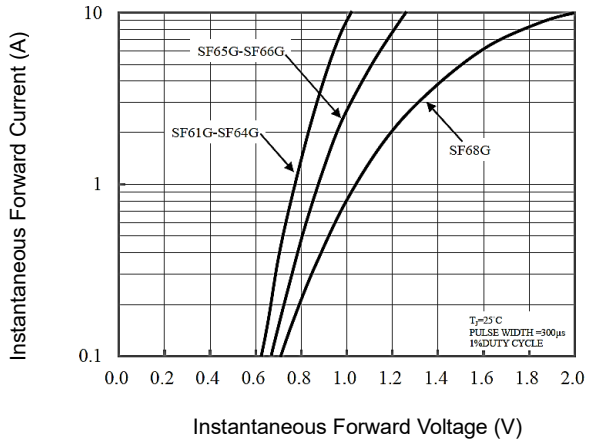


Fig3. Typical Instantaneous Forward Characteristics

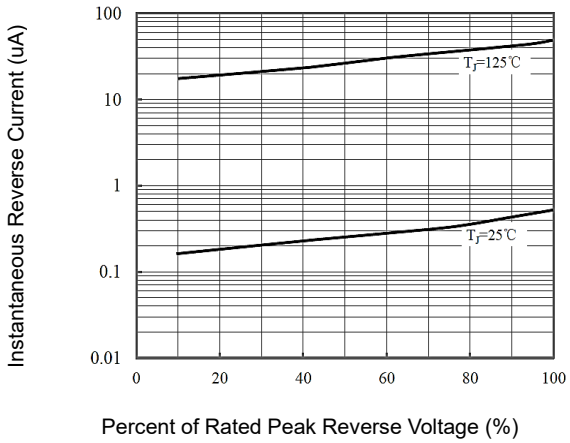


Fig4: Typical Reverse Capacitance

*Specifications subject to change without notice