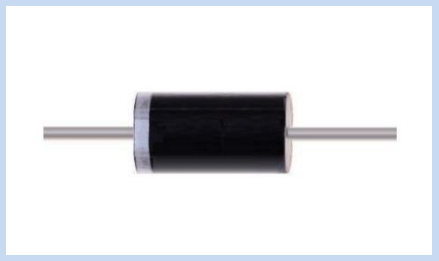
Silicon Rectifier
2A, 50~600V DO-15 Axial

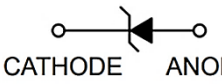
SF2xG Series

MERITEK

FEATURES

- Reverse Voltage Range: 50~600V
- Forward Current: 2.0A
- High Surge Current Capability
- Superfast Recovery Time for Switch Mode Application
- Application: DC to DC converter, Switching Mode Converters and Inverters, Freewheeling





RoHS

MECHANICAL DATA

- Case: DO-15, Molded Plastic Meets UL94V-0
- Lead: Axial leads, Solderable Per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End

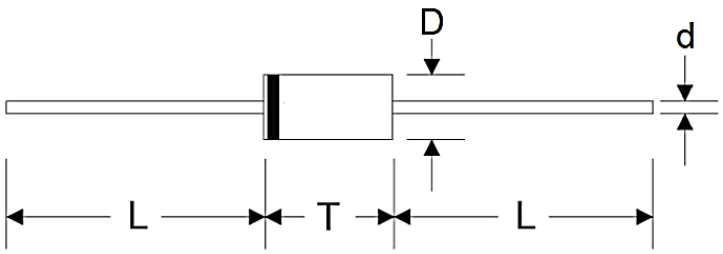
ELECTRICAL CHARACTERISTICS

Parameter		Symbols	SF2 1G	SF2 2G	SF2 3G	SF2 4G	SF2 5G	SF2 6G	SF2 7G	SF2 8G	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage		V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage		V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Forward Rectified Current at T_A=55°C		I_F	2								A
Peak Forward Surge Current, 8.3ms Single Half-Sinewave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	50								A
Maximum Forward Voltage at I_F= 2.0A		V_F	0.95			1.25		1.70			V
Maximum Reverse Current at Rated DC Blocking Voltage	$V_R = V_{RRM}$, T_J=25°C	I_R	5								μA
	$V_R = V_{RRM}$, T_J=125°C		150								
Typical Junction Capacitance		C_J	60								pF
Maximum Reverse Recovery Time		t_{rr}	35								ns
Operating Junction Temperature Range		T_J	-55 to +150								°C
Storage Temperature Range		T_{STG}	-65 to +175								°C

Note:
1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Junction capacitance measured at 1.0 MHz and applied reverse voltage of 4.0 VDC.
3. Reverse recovery time test condition: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

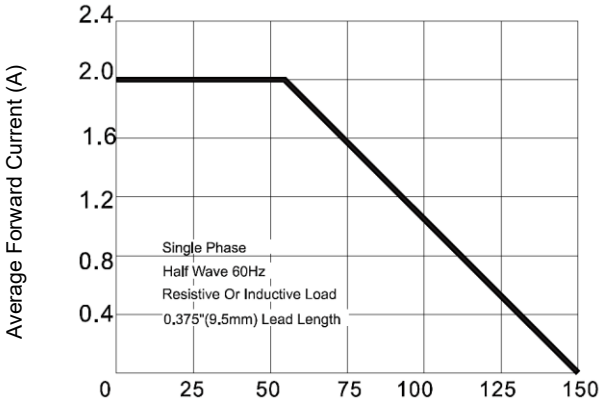
DIMENSIONS

Item	Min.(mm)	Max. (mm)
D	2.6	3.6
d	0.6	0.8
L	25.4	-
T	5.8	7.6

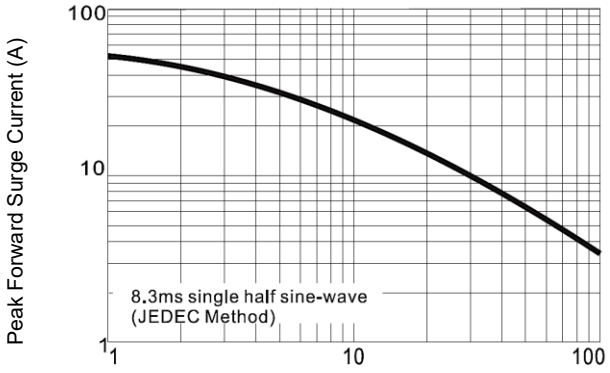


CHARACTERISTIC CURVES

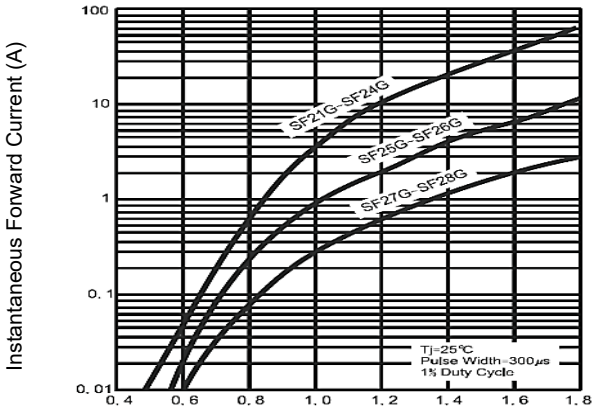
Typical Forward Current Derating Curve



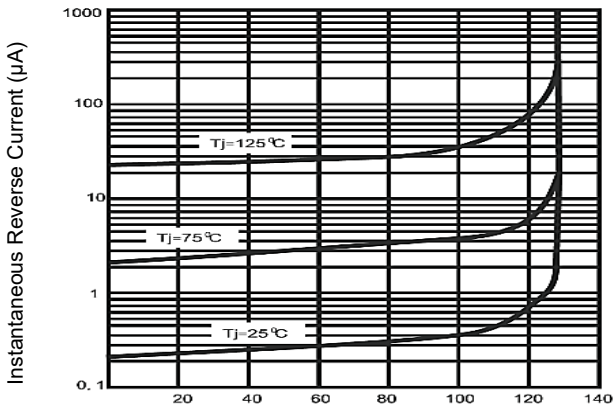
Maximum Non-repetitive Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance