SMFB16

SCHOTTKY BARRIER TYPE DIODE

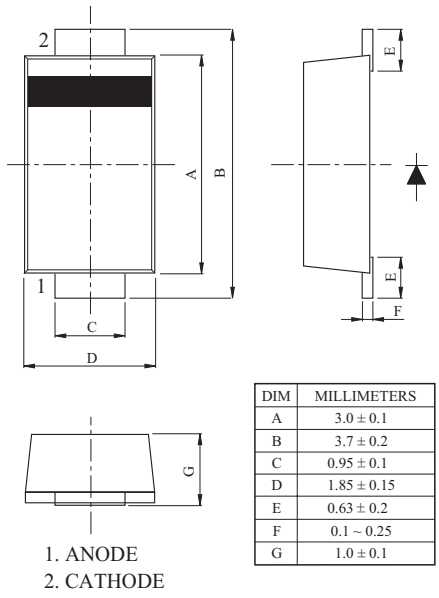
SWITCHING TYPE POWER SUPPLY APPLICATIONS.

FEATURES

- For Use in Low Voltage, High Frequency inverters, Free Wheeling, and Polarity Protection Applications.
- Suffix **U** : Qualified to AEC-Q101.
  ex) SMFB16-RTK/H**U**

APPLICATION

- Switching Power Supply.
- Reversed Battery Connection Protection.
- DC/DC Converter.
- Cellular Phones.



DIM	MILLIMETERS
A	3.0 ± 0.1
B	3.7 ± 0.2
C	0.95 ± 0.1
D	1.85 ± 0.15
E	0.63 ± 0.2
F	0.1 ~ 0.25
G	1.0 ± 0.1

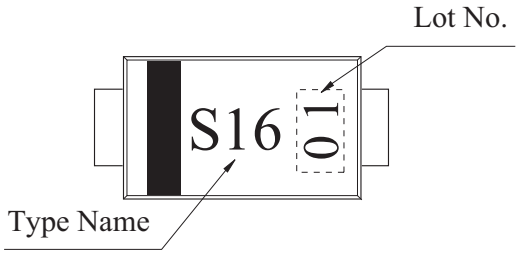
1. ANODE
2. CATHODE

SMF

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Average Output Rectitifed Current	I_O	1	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	30	A
Junction Temperature	T_j	-65 150	℃
Storage Temperature Range	T_{stg}	-65 150	℃

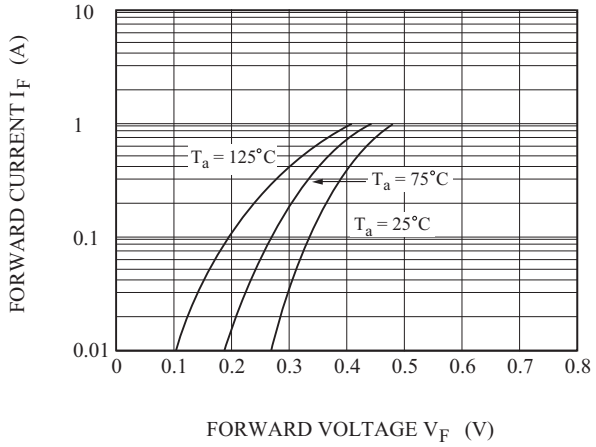
Marking



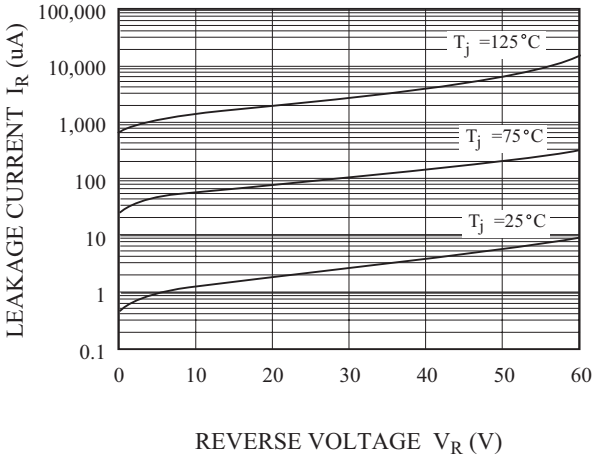
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM}=1.0A	-	0.49	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM}=Rated	-	7	50	μA
Total Capacitance	C_T	V_R=10V, f=1MHz	-	40	-	pF
Thermal Resistance	$R_{th(j-1)}$	Junction to lead	-	-	20	℃/W
	$R_{th(j-a)}$	Junction to ambient (on a grass-epoxy board)	-	-	140	

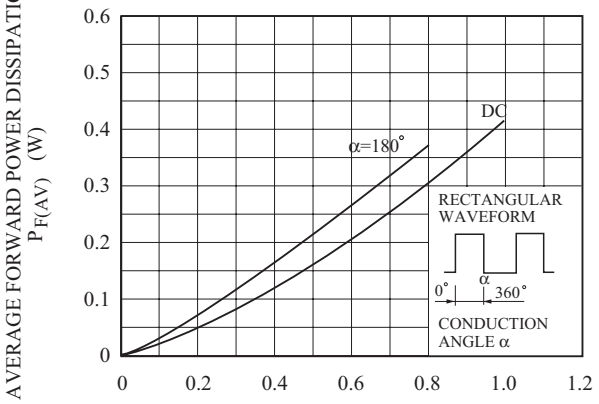
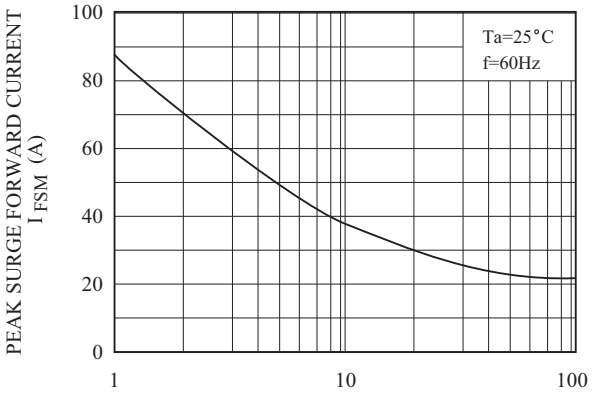
I_F - V_F



I_R - V_R



$P_{F(AV)}$ - $I_{F(AV)}$



SURGE FORWARD CURRENT (NON - REPETITIVE)