

SWITCHING TYPE POWER SUPPLY APPLICATIONS.

#### FEATURES

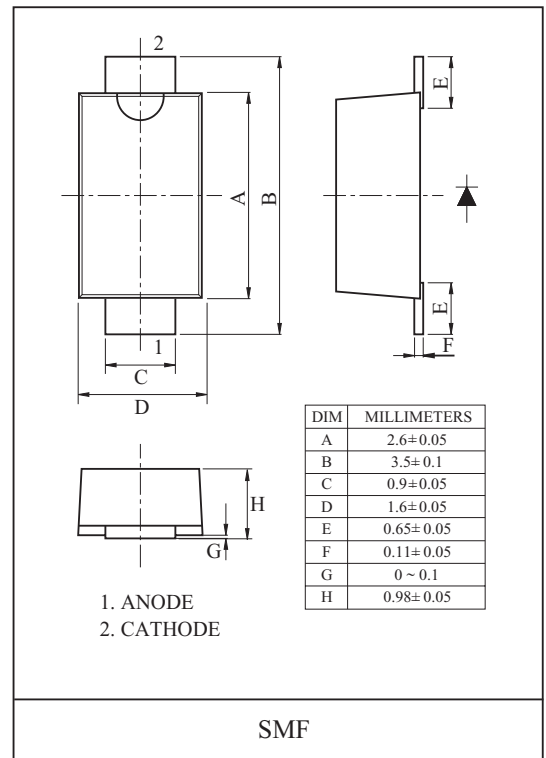
- Repetitive Peak Reverse Voltage :  $V_{RRM}=30V$ .
- Average Output Rectified Current :  $I_O=1.0A$ .
- Peak Forward Voltage :  $V_{FM}=0.42V(max.)$
- For Use in Low Voltage, High Frequency inverters, Free Wheeling, and Polarity Protection Applications.

#### APPLICATION

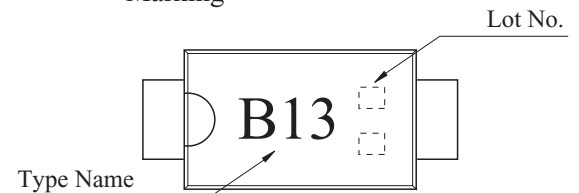
- Switching Power Supply.
- Reversed Battery Connection Protection.
- DC/DC Converter.
- Cellular Phones.

#### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Average Output Rectified Current	$I_O$	1	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	$I_{FSM}$	22	A
Junction Temperature	$T_j$	-65 150	
Storage Temperature Range	$T_{stg}$	-65 150	



#### Marking

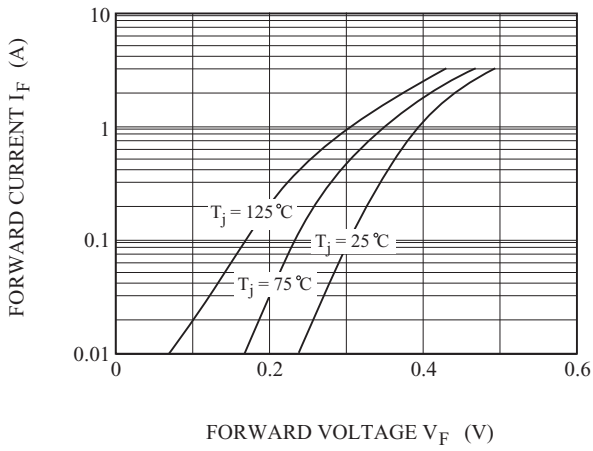


#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

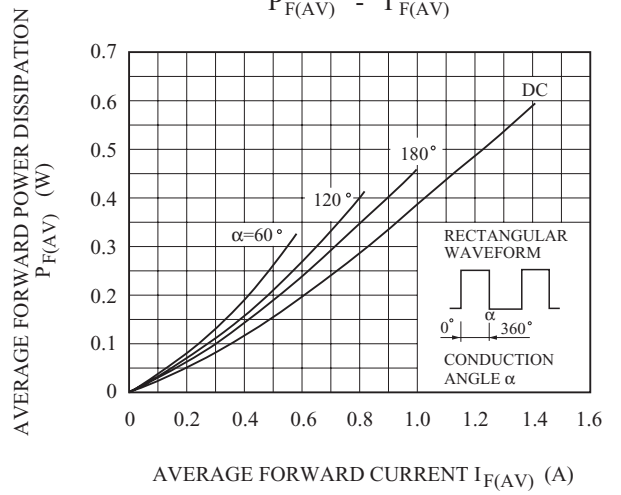
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM}$	$I_{FM}=1.0A$	-	-	0.42	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM}=\text{Rated}$	-	-	50	$\mu A$
Thermal Resistance	$R_{th(j-l)}$	Junction to lead	-	-	20	/W
	$R_{th(j-a)}$	Junction to ambient (on a grass-epoxy board)	-	-	140	

# SMFB13

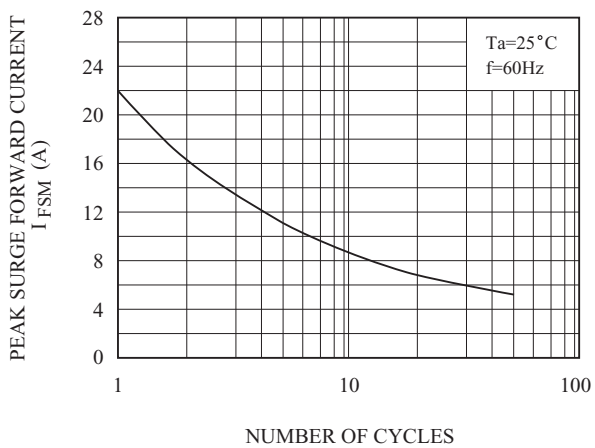
$I_F - V_F$



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



SURGE FORWARD CURRENT  
(NON - REPETITIVE)



$T_a - I_{F(AV)}$

