

SWITCHING TYPE POWER SUPPLY APPLICATIONS.

FEATURES

- Low Profile Surface Mount Package.
- Low Power Loss, High Efficiency.
- For Use in Low Voltage, High Frequency inverters, Free Wheeling, and Polarity Protection Applications.
- Suffix U : Qualified to AEC-Q101.
ex) SMAB13-EL/HU

APPLICATION

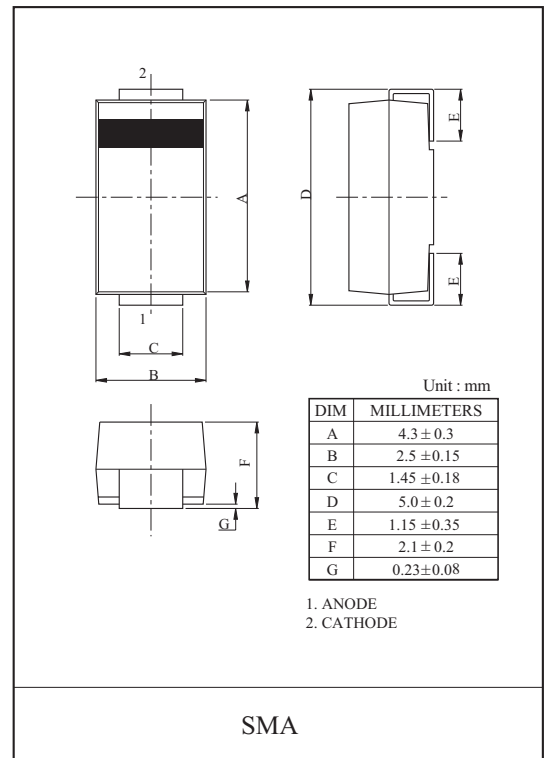
- Switching Power Supply.
- DC/DC Converter.
- Home Appliances, Office Equipment.
- Telecommunication.

MAXIMUM RATING (Ta=25 °C)

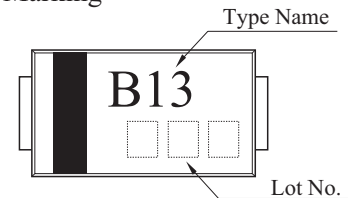
CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Average Output Rectified Current	I_O	1	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	40	A
Junction Temperature	T_j	-55 150	
Storage Temperature Range	T_{stg}	-55 150	

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}	$V_{RRM}=\text{Rated}$	-	-	1.0	mA
Thermal Resistance	$R_{th(j-l)}$	Junction to lead	-	-	23	/W
	$R_{th(j-a)}$	Junction to ambient (on alumina substrate)	-	-	108	

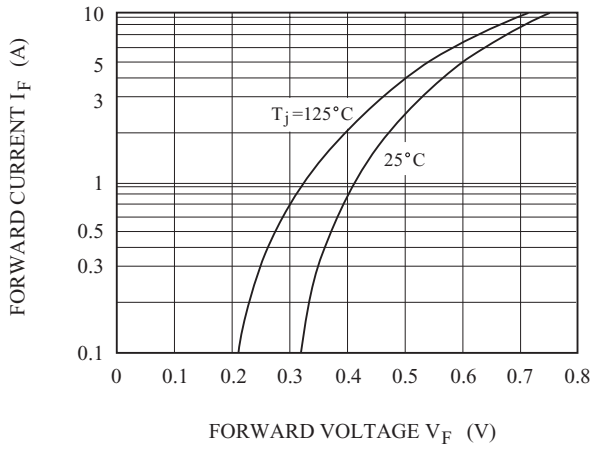


Marking

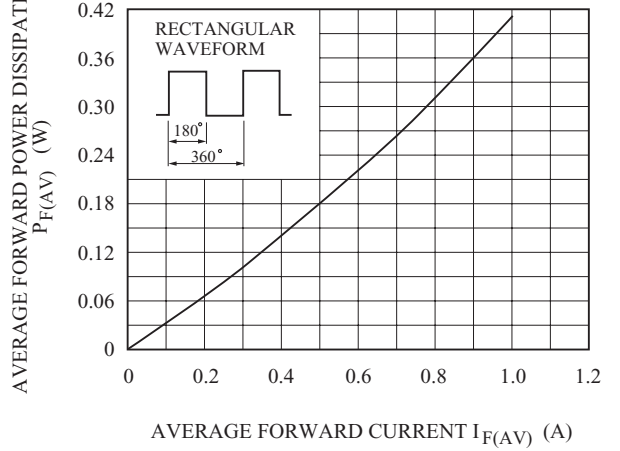


SMAB13

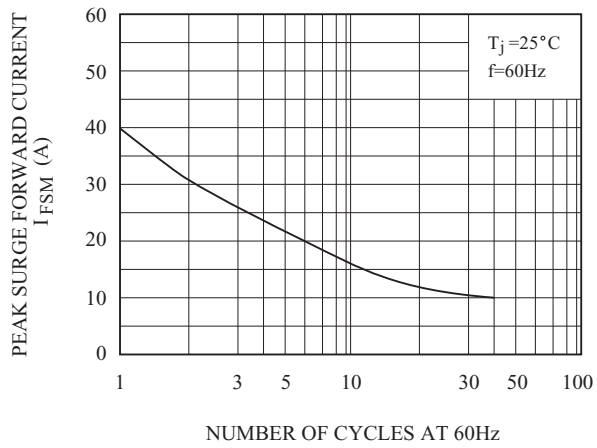
$I_F - V_F$



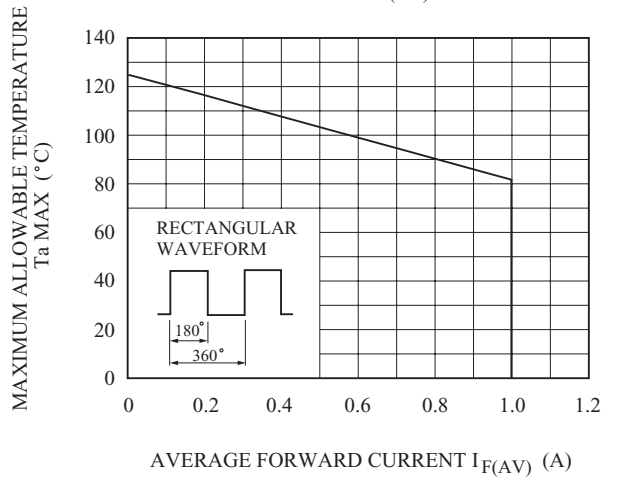
$P_{F(AV)} - I_{F(AV)}$



SURGE FORWARD CURRENT (NON - REPETITIVE)



$T_a - I_{F(AV)}$



$I_R - V_R$

