

SWITCHING TYPE POWER SUPPLY APPLICATIONS.

FEATURES

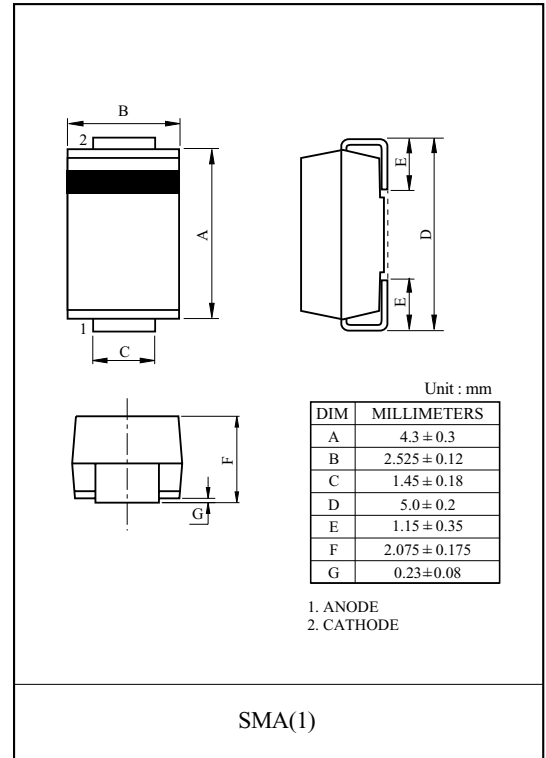
- Ultra-Fast Recovery Time for High Efficiency.
- Low Profile Surface Mount Package.
- Low Forward Voltage Drop, High current Capability, and Low Power Loss.

APPLICATION

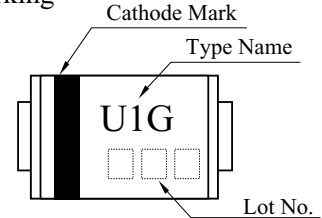
- Switching Power Supply.
- DC/DC Converter.
- Home Appliances, Office Equipment.
- Telecommunication, Factory Automation.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Average Output Rectified Current	I_O	1	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	I_{FSM}	33	A
Junction Temperature	T_j	-55 ~ 150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C



Marking



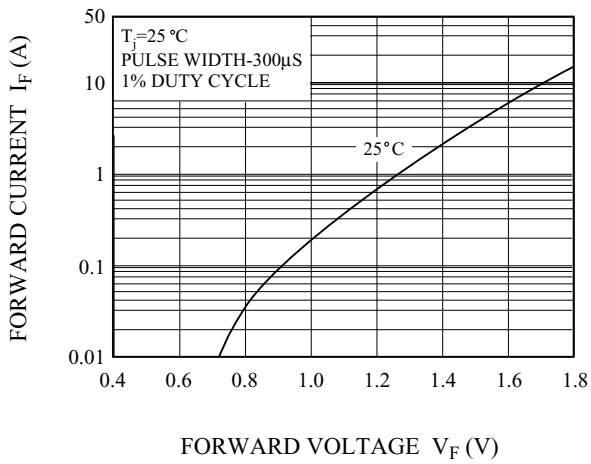
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=1.0A$	-	-	1.3	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=\text{Rated}$	-	-	5	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A, I_R=1.0A$	-	-	35	ns
Junction Capacitance	C_j	$V_R=4.0V, f=1MHz$	-	8	-	pF
Thermal Resistance	$R_{th(j-l)}$	Junction to lead	-	-	35	°C/W
	$R_{th(j-a)}$	Junction to ambient (Note 1)	-	-	85	°C/W

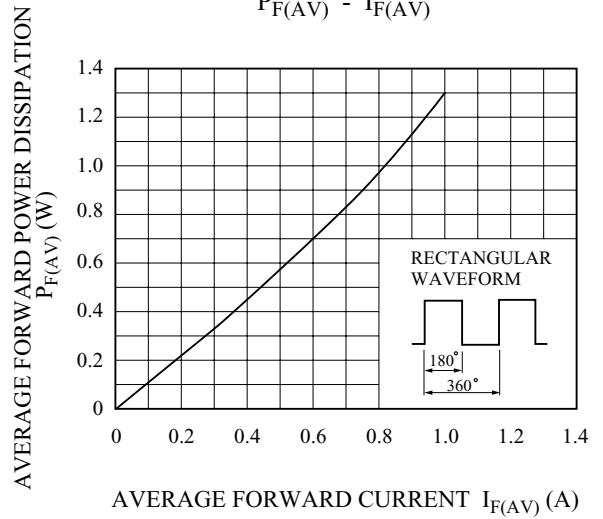
Notes : 1. P.C.B Mounted on 0.2 × 0.2 (5.0 × 5.0mm) Copper Pad Area.

SMAU1G

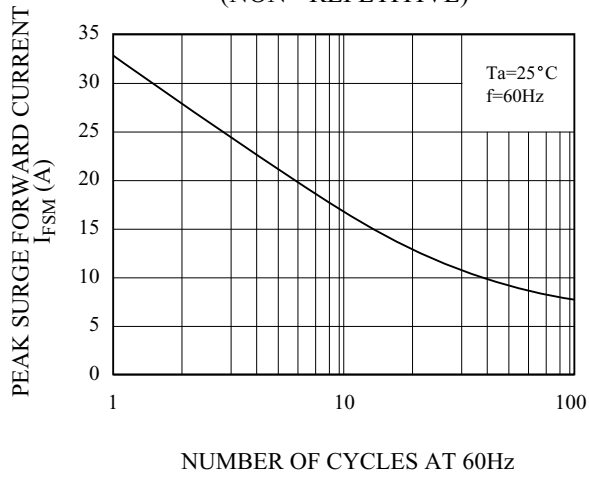
$I_F - V_F$



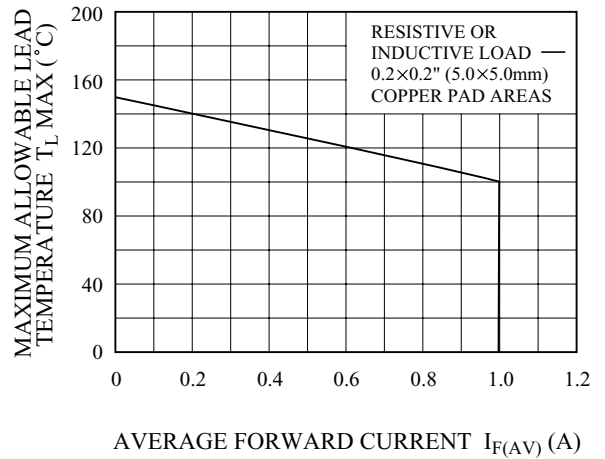
$P_{F(AV)} - I_{F(AV)}$



SURGE FORWARD CURRENT (NON-REPETITIVE)



$T_L - I_{F(AV)}$



$I_R - V_R$

