

SWITCHING TYPE POWER SUPPLY APPLICATIONS.

### FEATURES

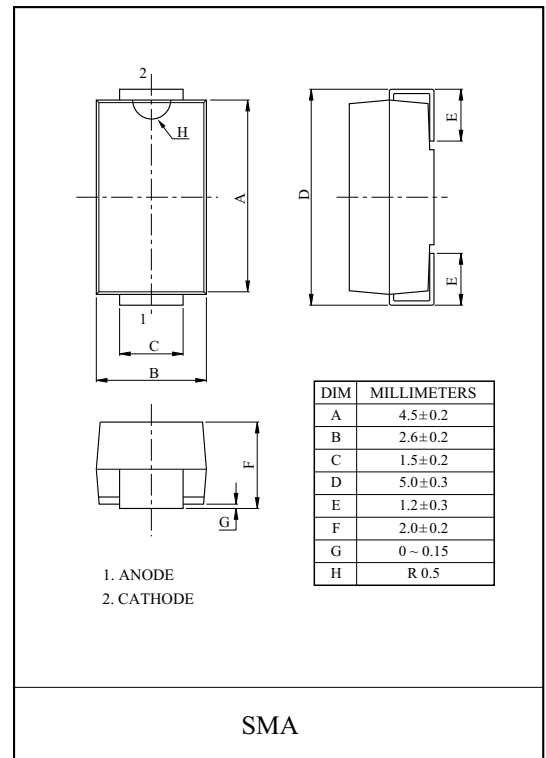
- Ultra-Fast Recovery Time for High Efficiency.
- Low Profile Surface Mount Package.
- Low Forward Voltage Drop, High current Capability, and Low Power Loss.

### APPLICATION

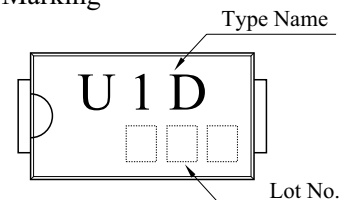
- Switching Power Supply.
- DC/DC Converter.
- Home Appliances, Office Equipment.
- Telecommunication, Factory Automation.

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	V
Average Output Rectified Current	$I_O$	1	A
Peak One Cycle Surge Forward Current (Non-Repetitive 60Hz)	$I_{FSM}$	33	A
Junction Temperature	$T_j$	-40 ~ 150	°C
Storage Temperature Range	$T_{stg}$	-40 ~ 150	°C



### Marking

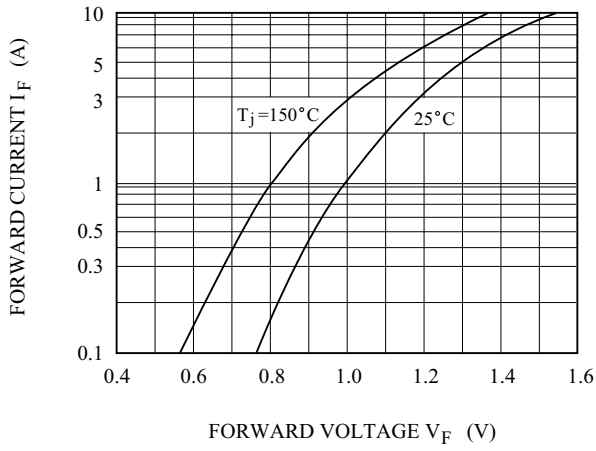


### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

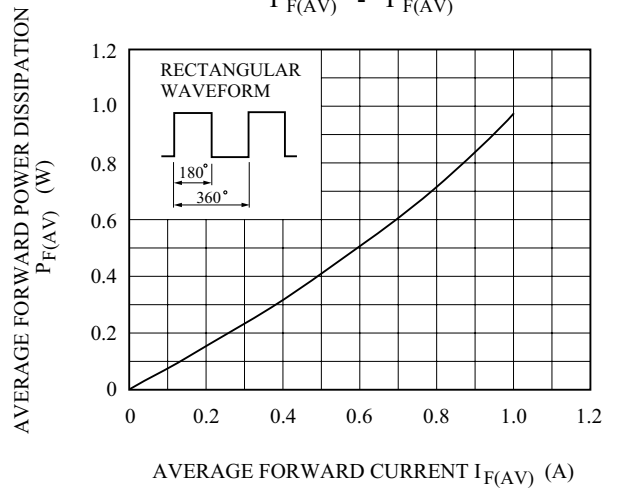
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM}$	$I_{FM}=1.0A$	-	-	0.98	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM}=\text{Rated}$	-	-	10	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_F=100mA, I_R=200mA$	-	-	50	ns
Thermal Resistance	$R_{th(j-l)}$	Junction to lead	-	-	23	°C/W
	$R_{th(j-a)}$	Junction to ambient (on alumina substrate)	-	-	108	°C/W

# SMAU1D

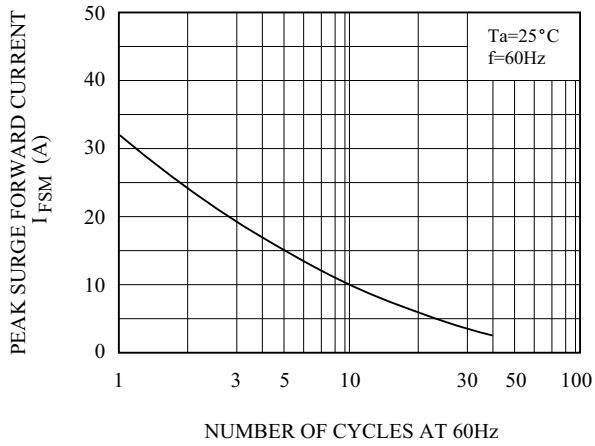
$I_F - V_F$



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



SURGE FORWARD CURRENT  
(NON - REPETITIVE)



$T_a - I_{F(AV)}$

