

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.

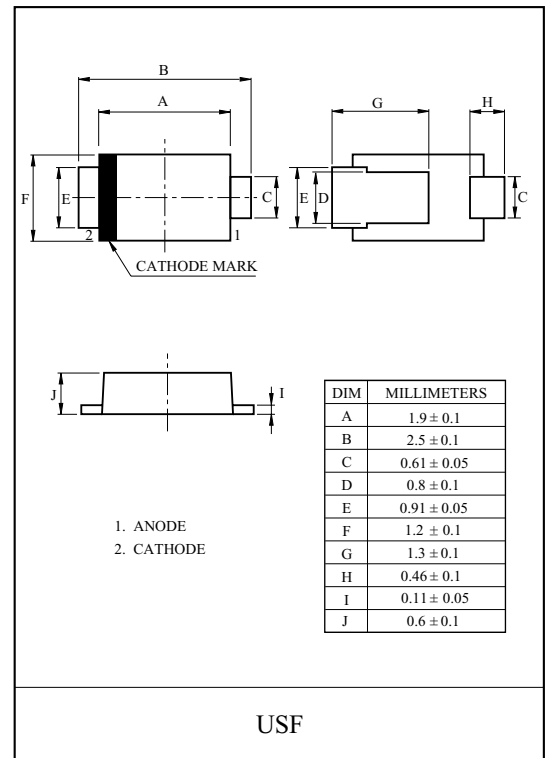
APPLICATION

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

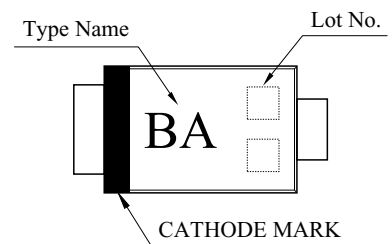
MAXIMUM RATING (Ta=25 °C)

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
Power Dissipation	P_D^*	830	mW
Junction Temperature	T_j	-40 ~ 125	°C
Storage Temperature Range	T_{stg}	-40 ~ 125	°C

* Mounted on a glass epoxy board (Soldering land : 6mm × 6mm)



Marking

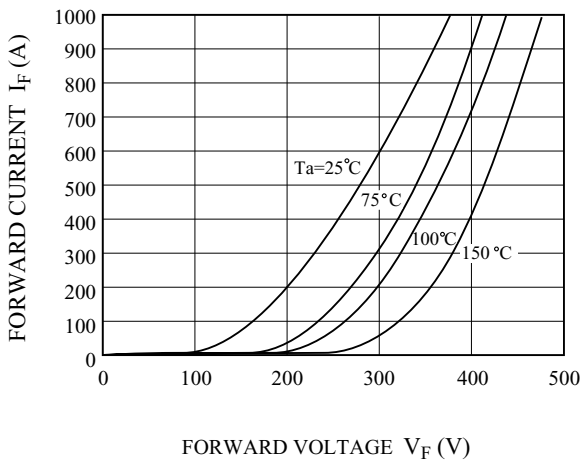


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

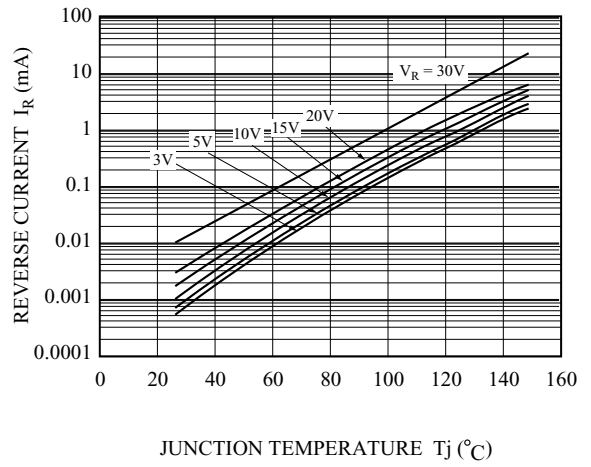
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=0.7A$	-	-	0.45	V
		$I_{FM}=1.0A$	-	-	0.52	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=30V$	-	5	50	μA
Junction Capacitance	C_j	$V_R=10V, f=1.0MHz$	-	40	-	pF

USFB13A

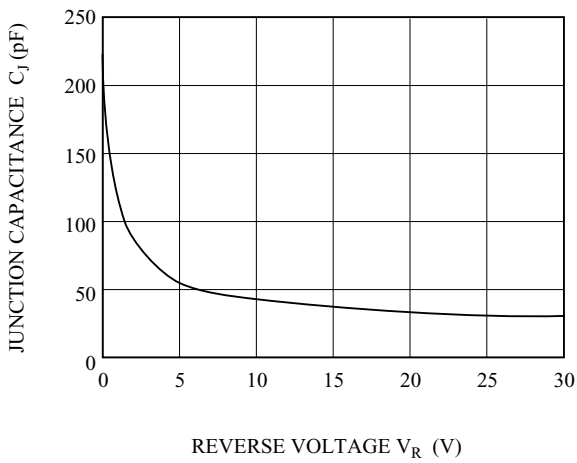
$I_F - V_F$



$I_R - T_j$



$C_J - V_R$



$R_{th(j-a)} - t$

