

PFC Circuit

FEATURES

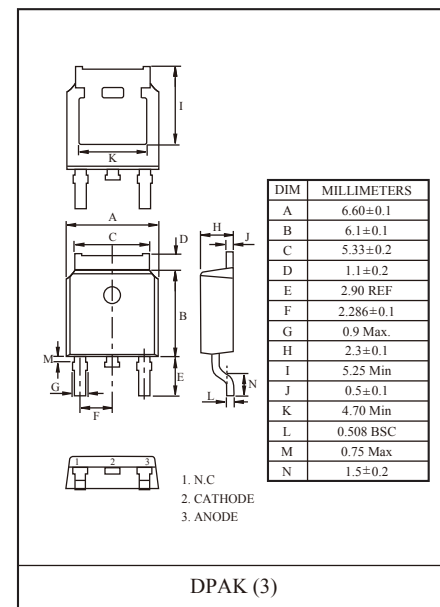
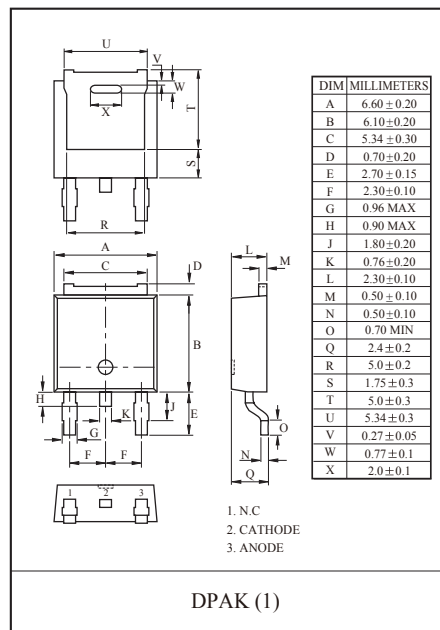
- Ultra-Fast Recovery Time for High Efficiency.
- Low Forward Voltage Drop, High Current Capability, and Low Power Loss.
- Suffix U : Qualified to AEC-Q101.
ex) U10A6CDC-RTF/HU

APPLICATION

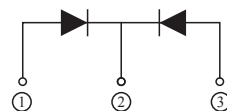
- Switching Power Supply.
- Home Appliances, Office Equipment.
- Telecommunication, Factory Automation.

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Reverse Voltage	V_{RM}	600	V
Average Output Rectified Current (Tc=94℃) (Note1)	I_O	10	A
Peak One Cycle Surge Forward Current (Non-Repetitive, tp=10ms)	I_{FSM}	100	A
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~150	℃



POLARITY

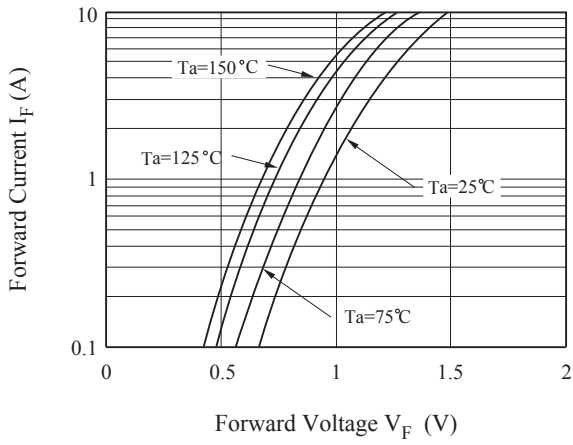


ELECTRICAL CHARACTERISTICS (Ta=25℃)

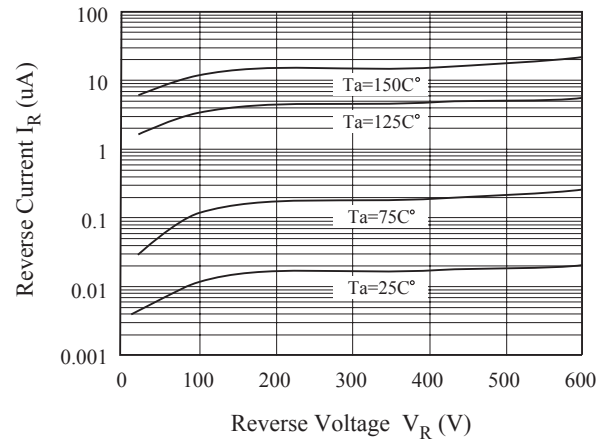
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=5A$	-	1.3	1.7	V
Reverse Current	I_{RM}	$V_{RM}=600V$	-	-	30	μA
Reverse Recovery Time	t_{rr}	$I_F=1.0A, V_R=30V, di/dt=-50A/\mu s$	-	24	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	6.0	℃ /W

U10A6CDC

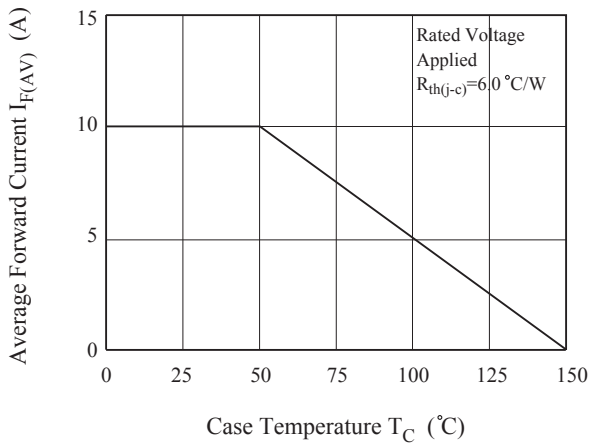
$I_F - V_F$



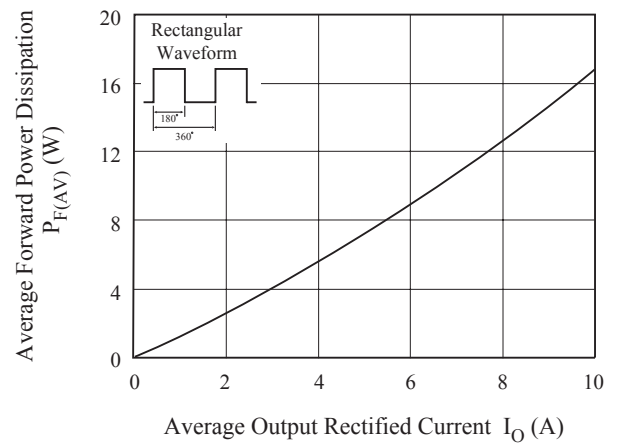
$I_R - V_R$



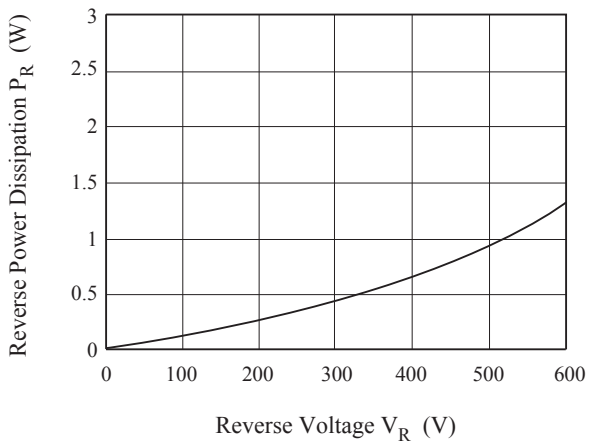
$I_{F(AV)} - T_C$



$P_{F(AV)} - I_O$



$P_R - V_R$



$R_{th(j-c)}$

