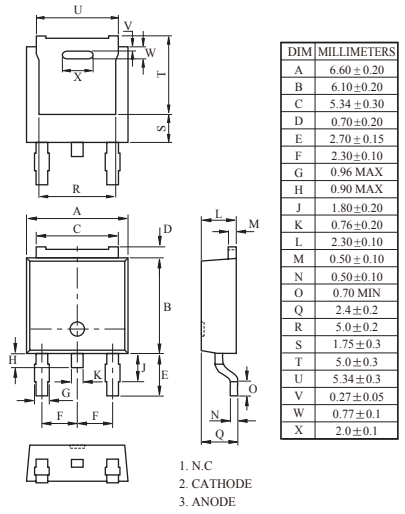
U5A6CD

ULTRA FAST RECOVERY RECTIFIER DIODE

PFC Circuit.



DIM	MILLIMETERS
A	6.60 ± 0.20
B	6.10±0.20
C	5.34 ± 0.30
D	0.70±0.20
E	2.70 ± 0.15
F	2.30±0.10
G	0.96 MAX
H	0.90 MAX
J	1.80±0.20
K	0.76±0.20
L	2.30±0.10
M	0.50 ± 0.10
N	0.50±0.10
O	0.70 MIN
Q	2.4±0.2
R	5.0±0.2
S	1.75±0.3
T	5.0±0.3
U	5.34±0.3
V	0.27±0.05
W	0.77±0.1
X	2.0±0.1

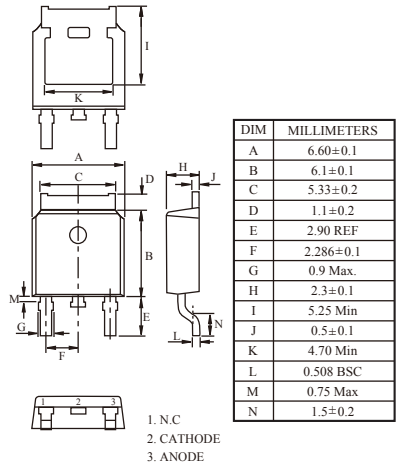
DPAK (1)

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) U5A6CD-RTF/H**U**

APPLICATION

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



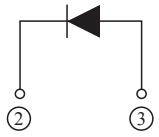
DIM	MILLIMETERS
A	6.60±0.1
B	6.1±0.1
C	5.33±0.2
D	1.1±0.2
E	2.90 REF
F	2.286±0.1
G	0.9 Max.
H	2.3±0.1
I	5.25 Min
J	0.5±0.1
K	4.70 Min
L	0.508 BSC
M	0.75 Max
N	1.5±0.2

DPAK (3)

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum Reverse Voltage	V_{RM}	600	V
Average Output Rectified Current (Tc=94℃)	I_O	5	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	℃

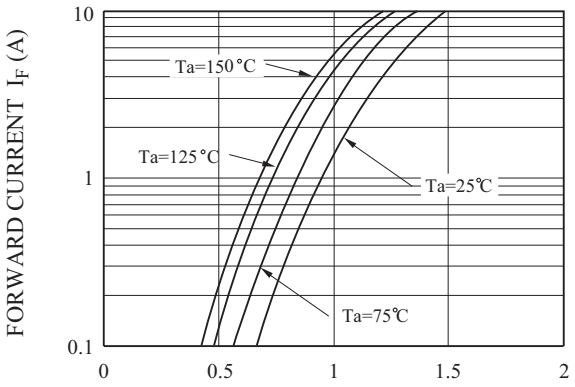
POLARITY



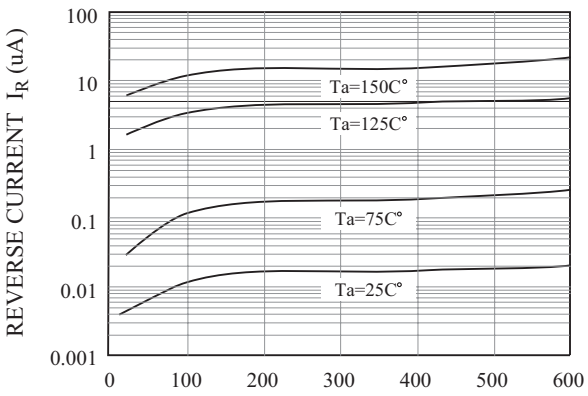
ELECTRICAL CHARACTERISTICS (Ta=25℃)

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/μs	-	24	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	6.0	℃ /W

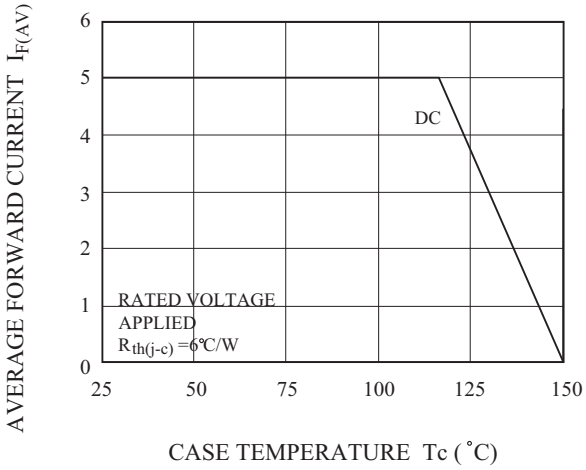
I_F - V_F



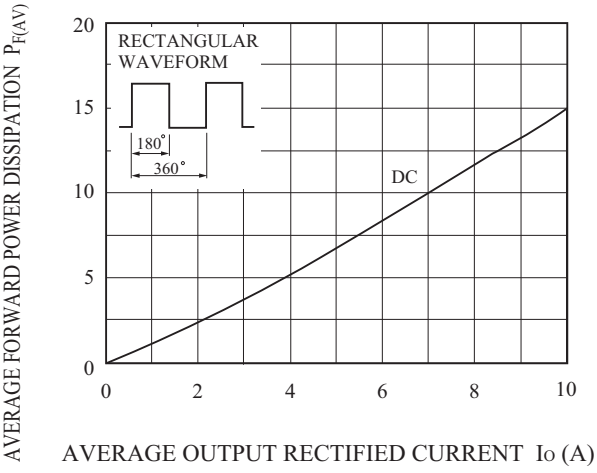
I_R - V_R



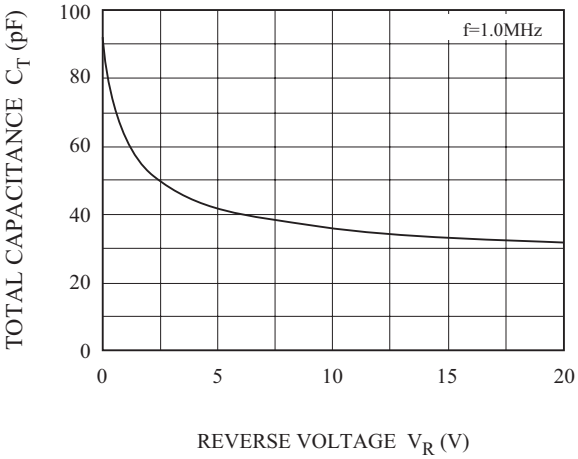
$I_{F(AV)}$ - T_C



$P_{F(AV)}$ - I_O



C_T - V_R



P_R - V_R