SIRECT ELECTRONIC

TM806FCH

Tandem Boost Schottky Diode – 8Amp 600Volt

☐ Features

-600Volt Tandem Schottky Barrier Diode
-Low T_{RR}, Q_{RR} and I_{RRM}
-Low V_F and I_R
-Low Switching and Conduction Losses
-Higher Efficiency
-High Junction Temperature Capability
-Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
-Halogen-Free

☐ Application

-Power Factor Correction(PFC), especially on Discontinuous Current Mode(DCM)
-AC/DC Converters
-DC/AC Inverters

☐ Maximum ratings and Electrical characteristics

Parameters		Symbol	Ratings		Unit
Repetitive Peak Reverse Voltage		V_{RRM}	600		V
Average Forward Current		$I_{F(AV)}$	8		A
Non-repetitive Peak Forward Surge Current		I_{FSM}	80		A
Forward Voltage Drop at Average Forward Current	T_J=25°C	V_F	2.0		V
	T_J=125°C		1.8		
Reverse Leakage Current at Rated DC Blocking Voltage	T_J=25°C	I_R	10		uA
	T_J=125°C		250		
Typical Junction Capacitance		C_J	200		pF
Reverse Recovery Time		T_{RR}	TYP.	MAX.	ns
I_F=0.5A, I_R=1.0A, I_{RR}=0.25A			16	20	
I_F=2A, V_R=400V, dI/dt=200A/us			38	45	
Reverse Recovery Charge I_F=2A, V_R=400V, dI/dt=200A/us		Q_{RR}	95		nC
Maximum Reverse Recovery Current I_F=2A, V_R=400V, dI/dt=200A/us		I_{RRM}	5		A
Softness Factor I_F=2A, V_R=400V, dI/dt=200A/us		S	0.75		
Typical Thermal Resistance		$R_{\theta JC}$	4.5		°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-50 to +150		°C

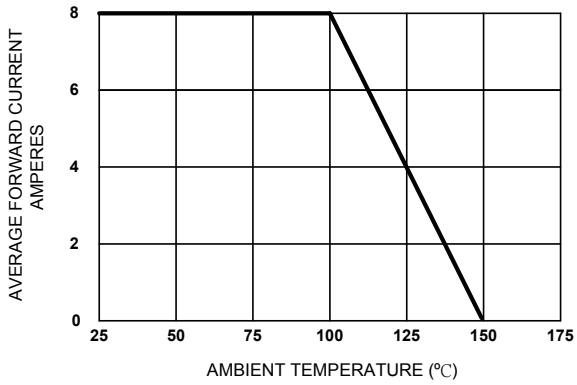

Figure 1. Forward Current Derating Curve

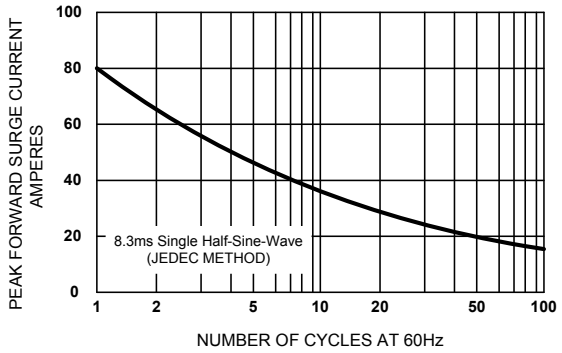

Figure 2. Maximum Non-repetitive Surge Current

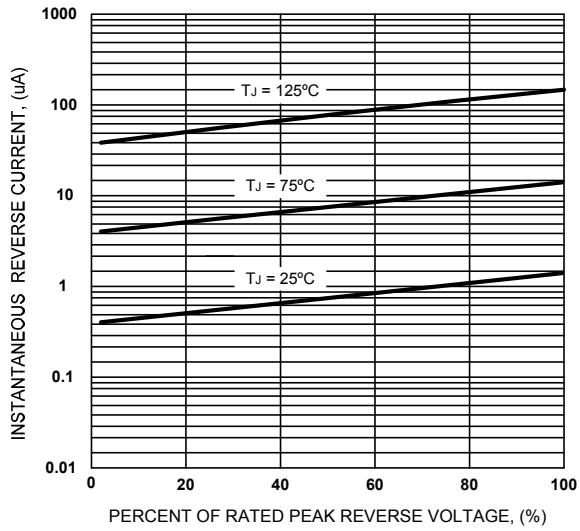

Figure 3. Typical Reverse Characteristics

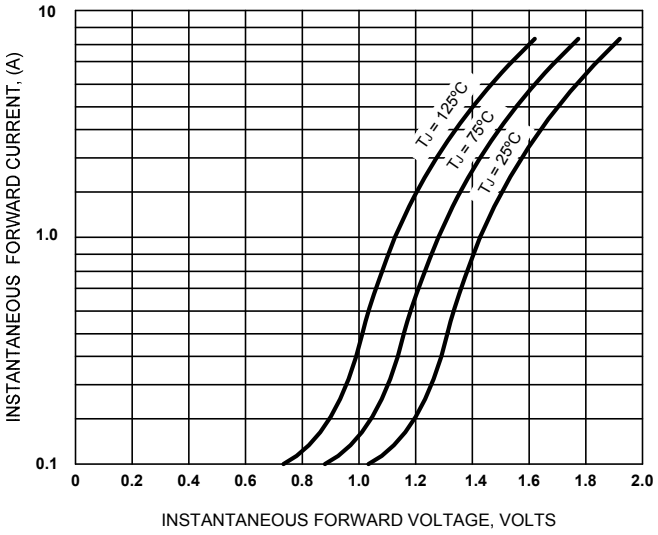

Figure 4. Typical Forward Characteristics

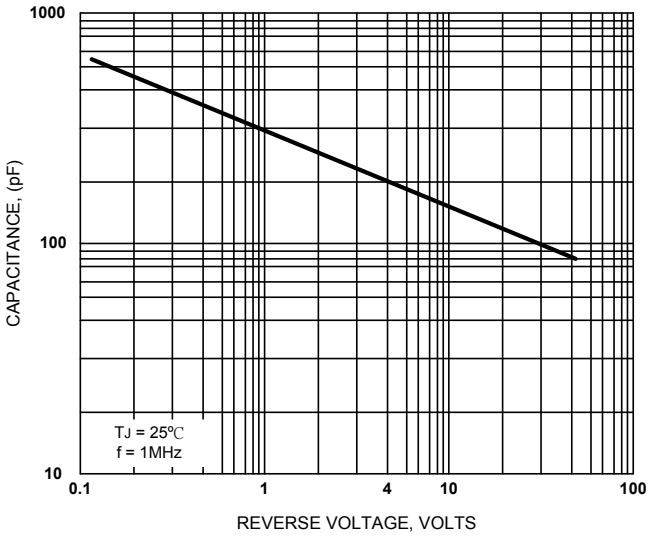

Figure 5. Typical Junction Capacitance

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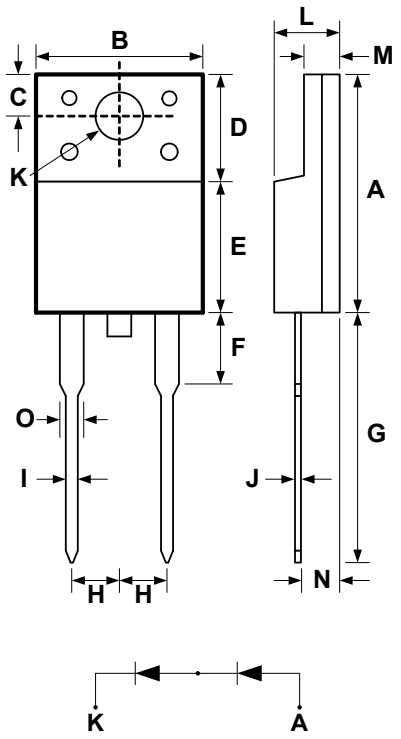

DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
A	.598	.638	15.20	16.20	
B	.386	.410	9.80	10.40	
C	.098	.138	2.50	3.50	
D	.232	.276	5.90	7.00	
E	.344	.384	8.75	9.75	
F	.112	.140	2.85	3.55	
G	.472	.532	12.00	13.50	
H	.093	.112	2.35	2.85	
I	.026	.037	0.65	0.95	
J	.012	.026	0.30	0.65	
K	.124	.148	3.15	3.75	
L	.173	.189	4.40	4.80	
M	.091	.106	2.30	2.70	
N	.094	.134	2.40	3.40	
O	.039	.055	1.00	1.40	

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