

## Tandem Boost Schottky Diode – 8Amp 600Volt

### Features

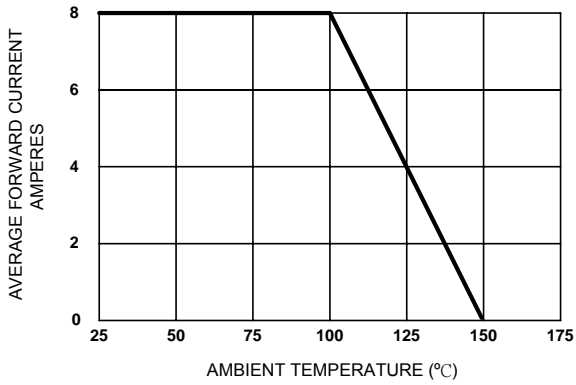
- 600Volt Tandem Schottky Barrier Diode
- Low TRR, QRR and IRRM
- Low VF and IR
- Low Switching and Conduction Losses
- Higher Efficiency
- High Junction Temperature Capability
- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- Halogen-Free

### Application

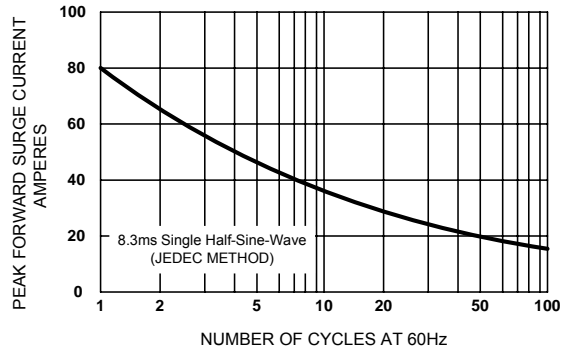
- Power Factor Correction(PFC), especially on Discontinuous Current Mode(DCM)
- AC/DC Converters
- DC/AC Inverters

### Maximum ratings and Electrical characteristics

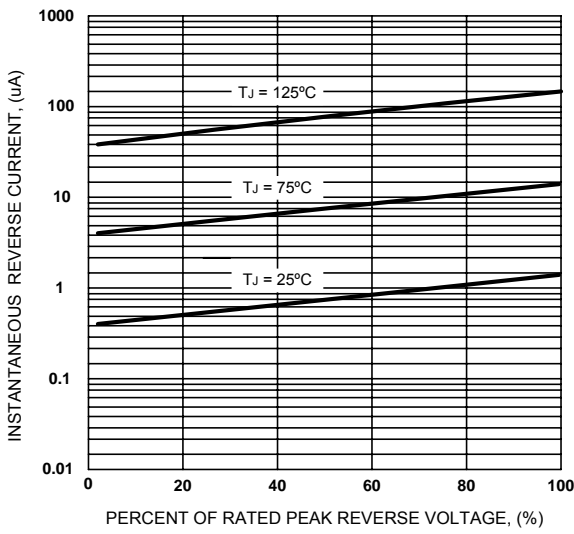
Parameters		Symbol	Ratings		Unit
Repetitive Peak Reverse Voltage		VRRM	600		V
Average Forward Current		IF(AV)	8		A
Non-repetitive Peak Forward Surge Current		IFSM	80		A
Forward Voltage Drop at Average Forward Current	TJ=25°C	VF	2.0		V
	TJ=125°C		1.8		
Reverse Leakage Current at Rated DC Blocking Voltage	TJ=25°C	IR	10		uA
	TJ=125°C		250		
Typical Junction Capacitance		CJ	200		pF
Reverse Recovery Time		TRR	TYP.	MAX.	ns
IF=0.5A, IR=1.0A, IRR=0.25A			16	20	
IF=2A, VR=400V, dI/dt=200A/us			38	45	
Reverse Recovery Charge		QRR	95		nC
IF=2A, VR=400V, dI/dt=200A/us					
Maximum Reverse Recovery Current		IRRM	5		A
IF=2A, VR=400V, dI/dt=200A/us					
Softness Factor		S	0.75		
IF=2A, VR=400V, dI/dt=200A/us					
Typical Thermal Resistance		RθJC	4.5		°C/W
Operating and Storage Temperature Range		TJ, TSTG	-50 to +150		°C



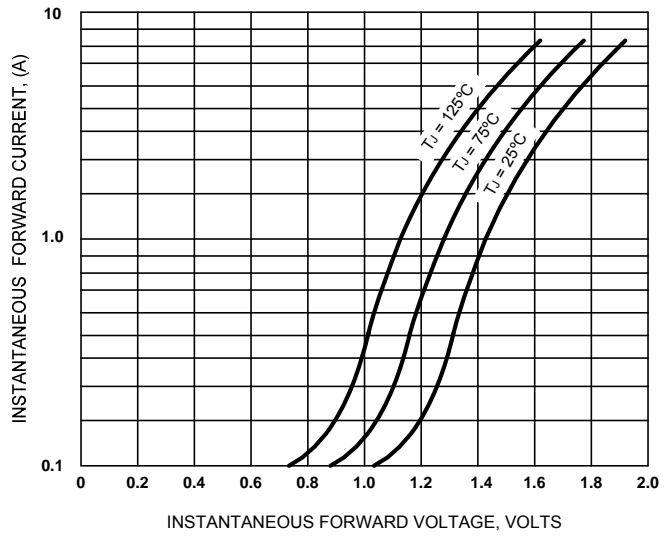
**Figure 1. Forward Current Derating Curve**



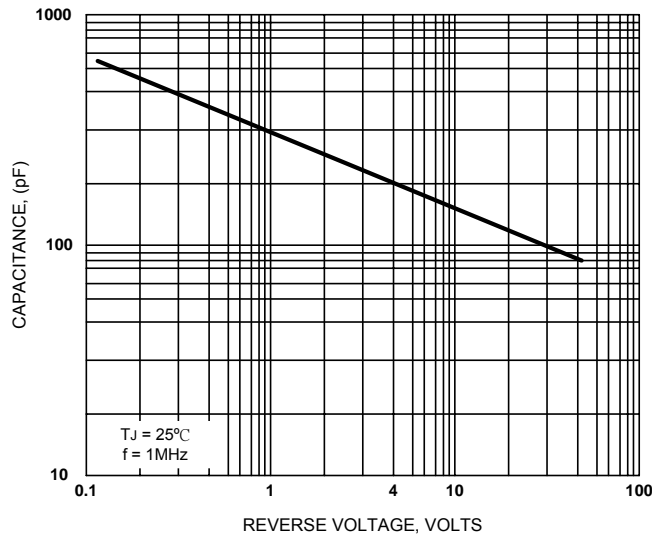
**Figure 2. Maximum Non-repetitive Surge Current**



**Figure 3. Typical Reverse Characteristics**



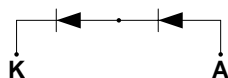
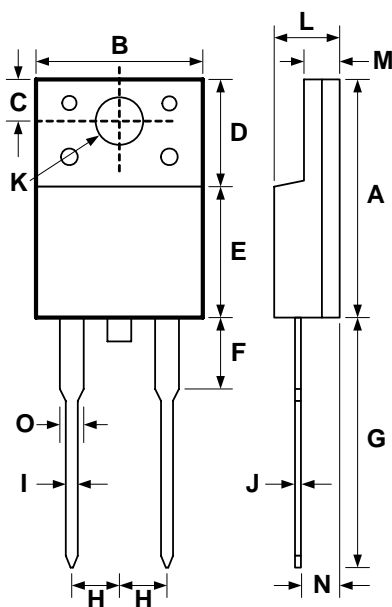
**Figure 4. Typical Forward Characteristics**



**Figure 5. Typical Junction Capacitance**

# TM806FCH

## ITO-220AC



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	.118	.142	3.00	3.60	
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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