

## 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	VF	TJ=25°C	V	
		TJ=125°C		1.8
Reverse Leakage Current at Rated DC Blocking Voltage	IR	TJ=25°C	uA	
		TJ=125°C		250
Typical Junction Capacitance	CJ	200	pF	
Reverse Recovery Time IF=0.5A, IR=1.0A, IRR=0.25A IF=2A, VR=400V, dI/dt=200A/us	TRR	TYP.	ns	
		16		20
		38		45
Reverse Recovery Charge IF=2A, VR=400V, dI/dt=200A/us	QRR	95	nC	
Maximum Reverse Recovery Current IF=2A, VR=400V, dI/dt=200A/us	IRRM	5	A	
Softness Factor IF=2A, VR=400V, dI/dt=200A/us	S	0.75		
Typical Thermal Resistance	ReJC	4.5	°C/W	
Operating and Storage Temperature Range	TJ, TSTG	-50 to +150	°C	

# TM806FCH/FCTH

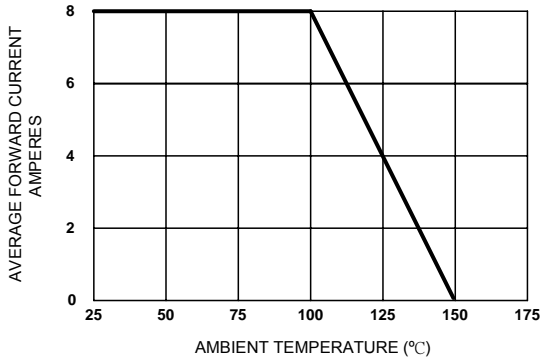


Figure 1. Forward Current Derating Curve

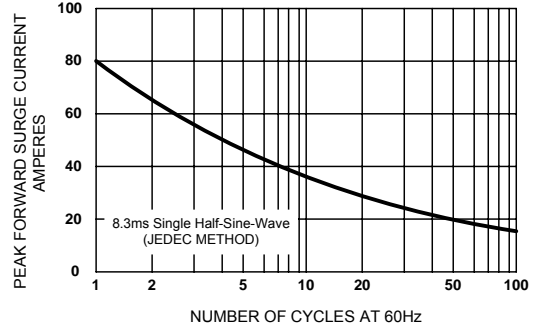


Figure 2. Maximum Non-repetitive Surge Current

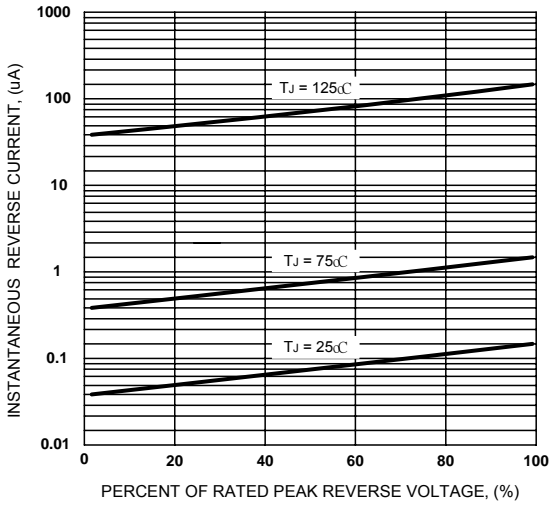


Figure 3. Typical Reverse Characteristics

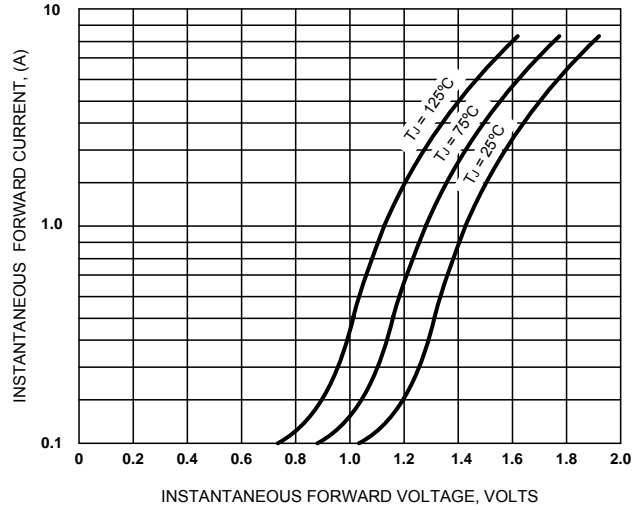


Figure 4. Typical Forward Characteristics

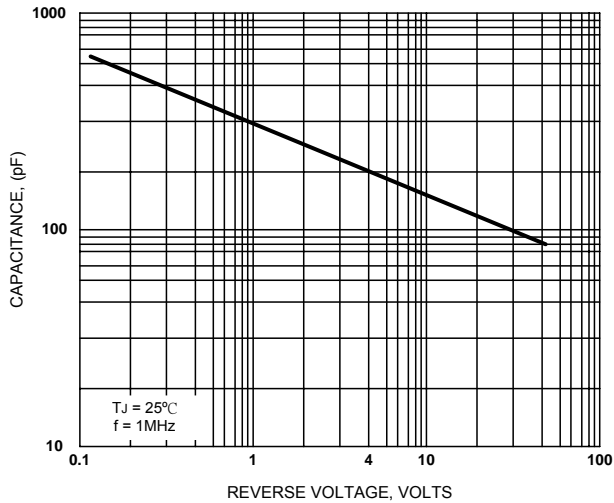
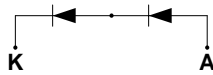
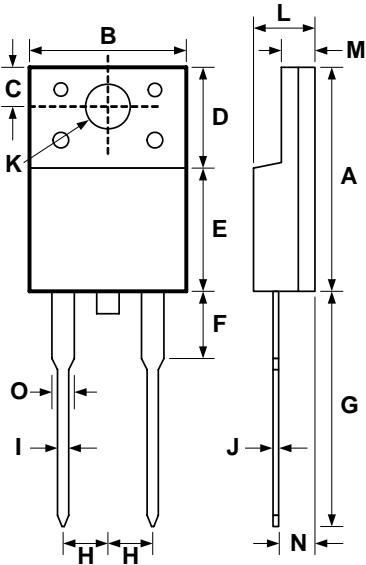


Figure 5. Typical Junction Capacitance

**TM806FCH**

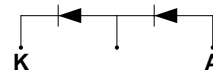
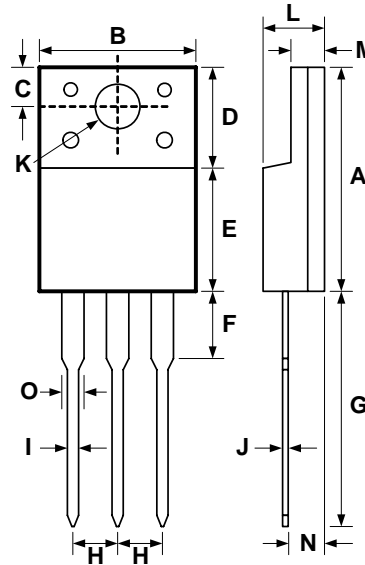
**ITO-220AC**



DIM	DIMENSIONS				NOTE
	INCHES		MILLIMETERS		
	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	

**TM806FCTH**

**ITO-220AB**



DIM	DIMENSIONS				NOTE
	INCHES		MILLIMETERS		
	MIN	MAX	MIN	MAX	
A	.598	.638	15.20	16.20	
B	.386	.410	9.80	10.40	
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