

600V / 8A FAST RECOVERY EPITAXIAL DIODE V_F=2.1V @ I_F=8A, t_{rr}=22ns ITO-220AC PRODUCT FEATURES Ultrafast Recovery Time Soft Recovery Characteristics .138(3.5).189(4.8).122(3.1) Low Recovery Loss .173(4.4) 406(10.3) .118(3.0).118(3.0) Low Forward Voltage .386(9.8) .102(2.6) .102(2.6) High Surge Current Capability Low Leakage Current .622(15.8) .583(14.8) APPLICATIONS .04 MAX Converter, PFC (1.0) Freewheeling, Snubber 157(4.0) UPS, Plating Power Supply 118(3.0) Inversion Welder .114(2.9).059(1.5).098(2.5).551(14.0) MECHANICAL DATA .043(1.1).511(13.0) .031(0.80) Case: ITO-220AC Molded Plastic .020(0.50) .028(0.70) • Epoxy: UL94V-0 rate flame retadant .105(2.67).020(0.50).095(2.41)Polarity : As Marked

ABSOLUTE MAXIMUM RATINGS (TC=25°C unless otherwise specified)

PARAMETER Maximum Repetitive Reverse Voltage		SYMBOL	VALUES	UNIT
		Marking	D8A06FT 600	
		VRM		
Average Forward Current	T _C =110°C	IF(AV)	8	А
Non-Repetitive Surge Forward Current	t _P =10ms, 50Hz, Half Sine Wave	IFSM	110	Α
Power Dissipation		PD	36.7	W
Operating Junction and Storage Temperatures		T _J , Tstg	-55 to + 150	℃
Thermal Resistance	Junction-to-Case	Rejc	3.4	°C/w
Module-to-Sink			1.1	Nt.m
Weight			2.3	g

Dimensions in inches (millimeter)

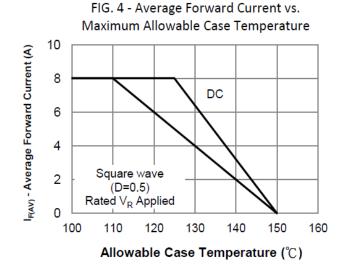
ELECTRICAL AND DYNAMIC RECOVERY CHARACTERISTICS (T_J=25°C, unless otherwise specified)

PARAMETER	TEST CONDITIONS	SYMBOL	Min.	Тур.	Max.	UNIT
Reverse Leakage Current	VR=600V	I _{RM}	-	-	25	μA
	VR=600V, TJ=125°C		1 1-	-	250	μА
ForwardVoltage	IF=8A	VF	142	1.7	2.1	V
	IF=8A, TJ=125°C		-	-	1.9	V
Reverse RecoveryTime	IF=1A, VR=30V, diF/dt=-200A/μs	trr		18	28	ns
Reverse RecoveryTime	V _R =300V, I _F =8A	trr	-	22	100	ns
Max. Reverse Recovery Current	di _F /dt=-200A/μs, TJ=25°C	IRRM	N=	2.5	970	Α
Reverse RecoveryTime	V _R =300V, I _F =8A	trr	.14	48	623	ns
Max. Reverse Recovery Current	di _ε /dt=-200A/μs, TJ=125°C	IRRM	181	5.5	180	Α
			1989	REV. 6	, 30-De	c-2014



FIG. 1 - Typical Forward Voltage Drop Characteristics 30 I_F - Forward Current (A) 25 20 15 T_J=125℃ 10 T_J=25℃ 5 0 0 0.5 1 1.5 2 2.5 3 V_F - Forward Voltage Drop Voltage (V)

FIG. 2 - Typical Value of Reverse Current vs. Reverse Voltage 100 I_R - Reverse Current (uA)
10.0
100
01 T_J=125°C T_J=100°C T_.=150°C T_J=25°C 0.001 100 200 300 400 500 600 V_R - Reverse Voltage (V)



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!