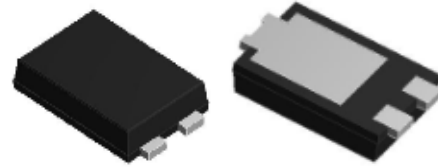


8A, 600V Superfast Recovery Rectifier

FEATURES

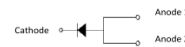
- Superast reverse recovery time
- High surge forward current capability
- Low profile - typical body height 1.1 mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- RoHS compliant, halogen free

TO-277B



RoHS
COMPLIANT

HALOGEN
FREE



MECHANICAL DATA

- Case: TO-277B
- Case material: molding compound meets UL 94V-0 flammability rating

TYPICAL APPLICATION

General purpose use in AC to DC wave rectification for SMPS, lighting, adapter, charger, home appliance, office equipment and telecommunication.

MAXIMUM RATINGS

$T_A=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	
Maximum DC blocking voltage	V_{DC}	600	
Average Forward Rectified Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	70	A
Operating Junction Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

$T_A=25^\circ\text{C}$ unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@ $I_F=5\text{A}$	$T_A=25^\circ\text{C}$	V_F	1.45	1.6	V
	$T_A=125^\circ\text{C}$		1.1	1.25	
Forward Voltage@ $I_F=8\text{A}$	$T_A=25^\circ\text{C}$	V_F	1.65	1.8	V
	$T_A=125^\circ\text{C}$		1.25	1.4	
Reverse Current @ V_{RRM}	$T_A=25^\circ\text{C}$	I_R	-	5	uA
	$T_A=125^\circ\text{C}$		-	200	
Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1\text{A}$ $I_{RR}=0.25\text{A}$	T_{RR}	35		ns
Typical Thermal Resistance (junction to ambient)		$R_{\theta JA}$	56		$^\circ\text{C}/\text{W}$

8A, 600V Superfast Recovery Rectifier

RATINGS AND CHARACTERISTIC CURVES

T_A=25°C unless otherwise noted

FIG.1: Forward Output Current Derating Curve

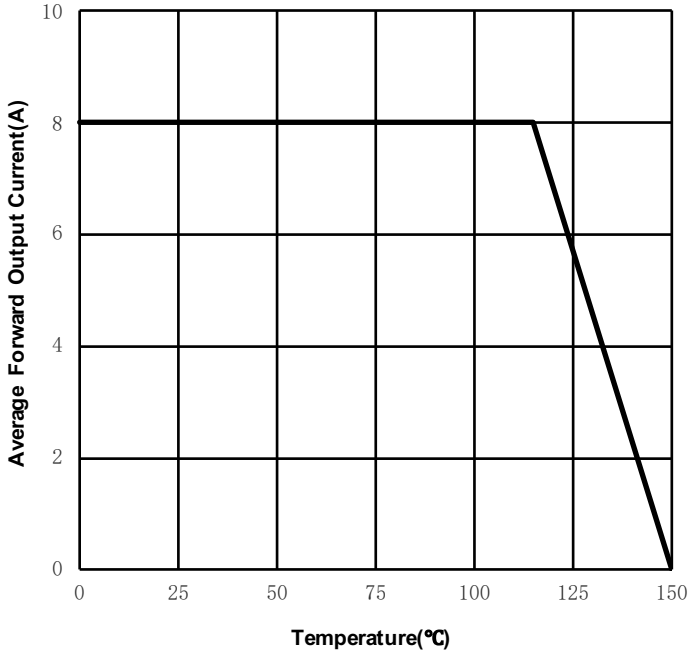


FIG.2: Maximum Non-Repetitive Peak Forward Surge Current

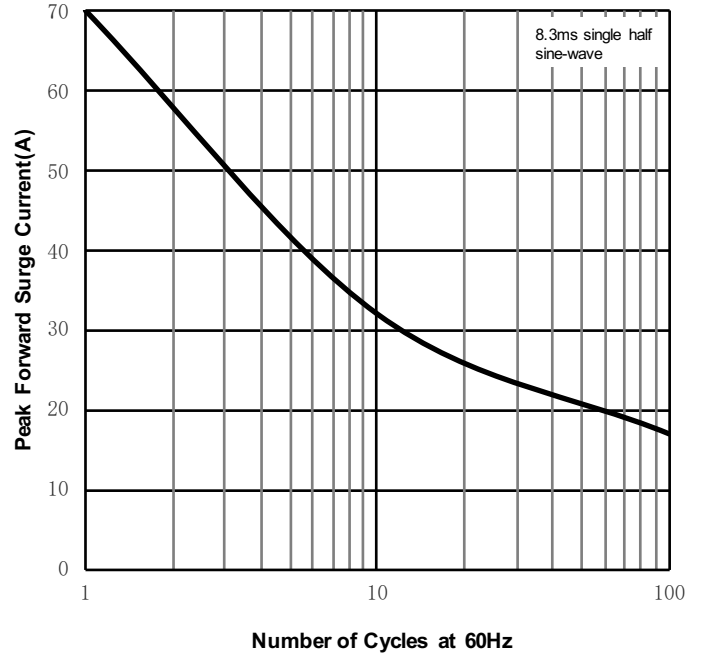


FIG.3: Typical Forward Characteristics

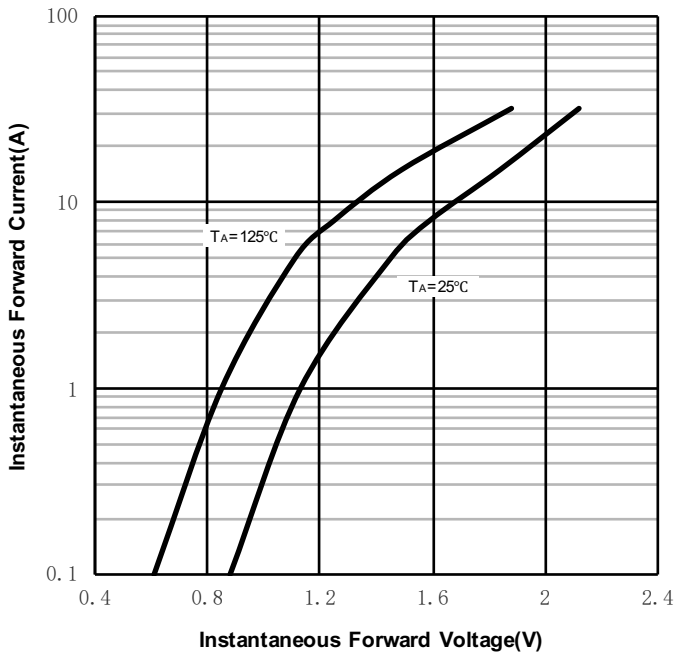
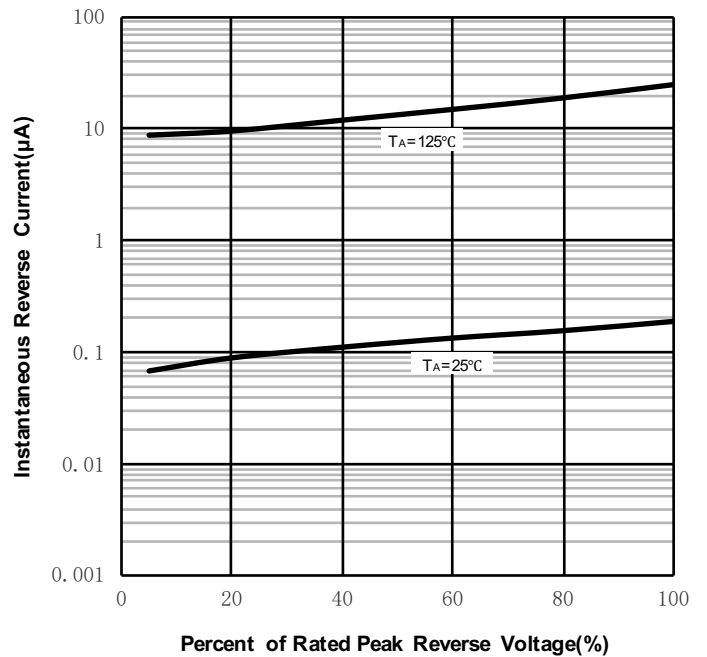
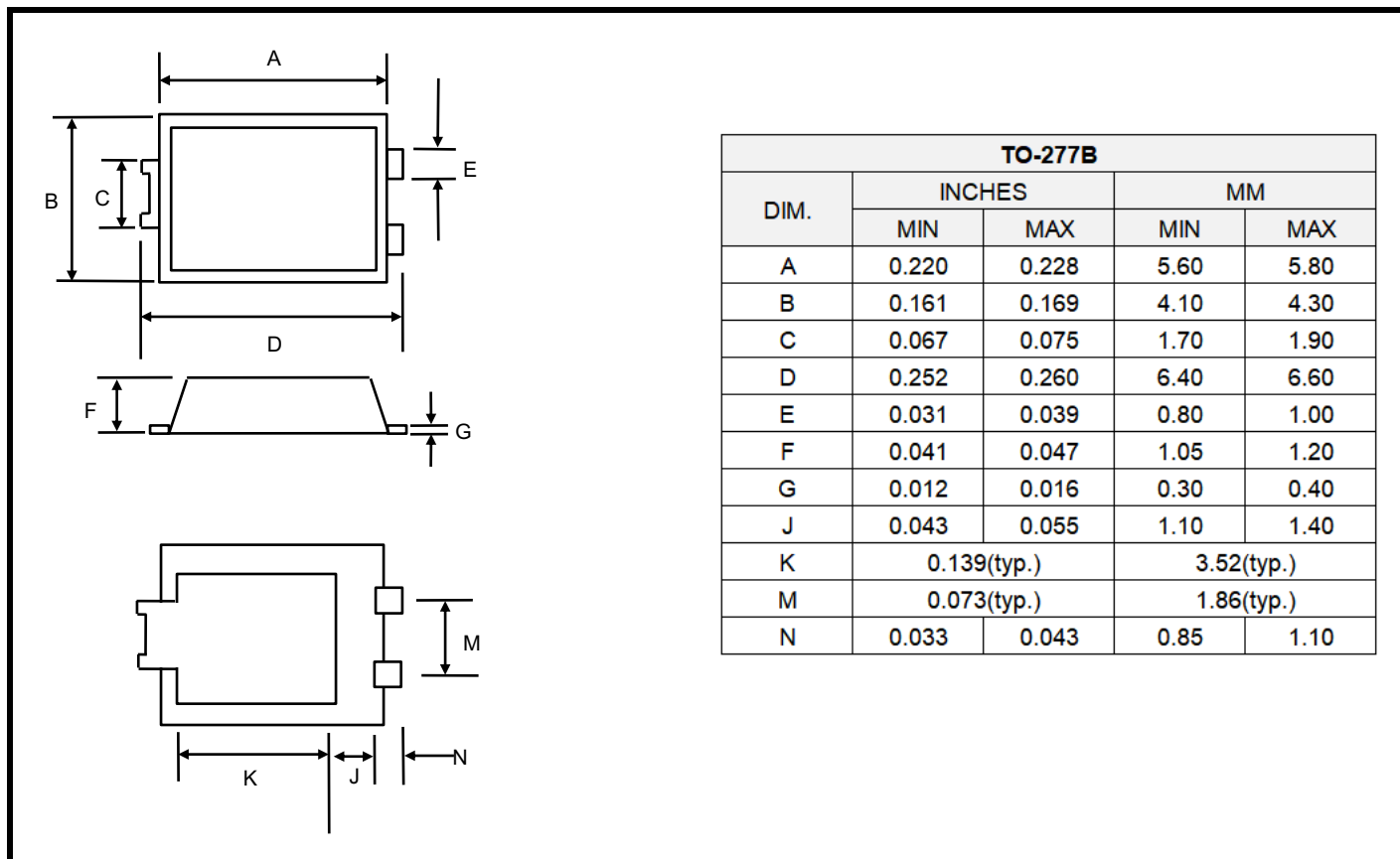


FIG.4: Typical Reverse Characteristics



8A, 600V Superfast Recovery Rectifier

PACKAGE OUTLINE DIMENSIONS



PACKING INFORMATION

Package	Reel(PCS)	Inner Box(PCS)	Carton(PCS)
TO-277B	5,000	10,000	80,000