

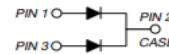
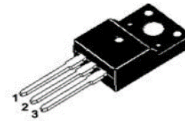
FEATURES AND BENEFITS

- Low power loss, high efficiency operation
- Low forward voltage drop
- Fast switching capability
- High forward surge capability
- Excellent High Temperature Stability

MECHANICAL DATA

- Epoxy : UL94 V-0 rated flame retardant
- Case: ITO-220AB Package
- Terminals: Matte Tin annealed over copper
- Weight: Approximated 2.03 grams

Primary Characteristic	
I_O	2X20A
V_{RRM}	120V
I_{FSM}	350A
V_F Typical=8A, $T_a=125^\circ\text{C}$	0.56V
T_{Jmax}	175°C



Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise specified)			
Characteristics	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	120	V
Working Peak Reverse Voltage	V_{RWM}	120	V
DC Blocking Voltage	V_{DC}	120	V
RMS Reverse Voltage	V_{RMS}	120	V
Average Forward Rectified Current (per diode)	I_O	20	Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	350	Amps

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)						
Characteristics		Symbol	Typ.	Max.	Unit	
Forward Voltage Drop ¹⁾	IF=8A	$T_a=25^\circ\text{C}$	V_F	0.70	0.74	V
	IF=20A	$T_a=25^\circ\text{C}$	V_F	0.96	1.00	V
	IF=8A	$T_a=125^\circ\text{C}$	V_F	0.56	0.60	V
	IF=20A	$T_a=125^\circ\text{C}$	V_F	0.70	0.74	V
Reverse Current ²⁾	VR=120V	$T_a=25^\circ\text{C}$	I_R	10	30	μA
	VR=120V	$T_a=125^\circ\text{C}$	I_R	3	10	mA

THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)				
Characteristics		Symbol	Value	Unit
Typical Thermal Resistance, junction to case	ITO-220AB	$R_{\theta JC}$	4.0	$^\circ\text{C/W}$
Operating Temperature Range (in DC Mode)		T_J	-65 to +175	$^\circ\text{C}$
Storage Temperature Range		T_{STG}	-65 to +150	$^\circ\text{C}$

Notes (1): Pulse test: 300 μs pulse width, 1% duty cycle.

Notes (2): Pulse width $\leq 40\text{ms}$

Notes (3): FR-4 PCB, 2oz copper. Minimum recommended pad layout

RATINGS AND CHARACTERISTICS CURVES

Fig 1. Typical Forward Characteristics

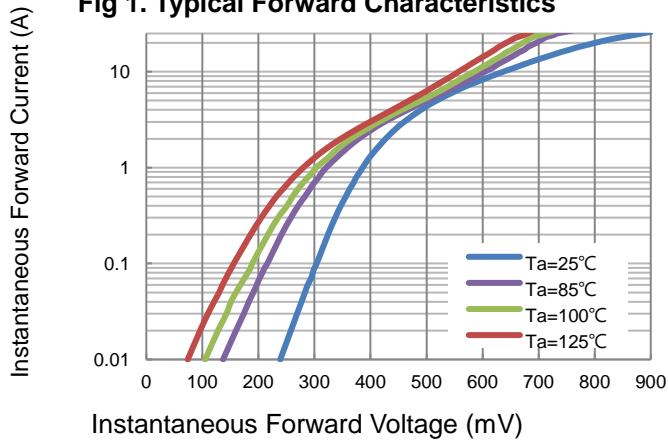


Fig 2. Typical Reverse Characteristics

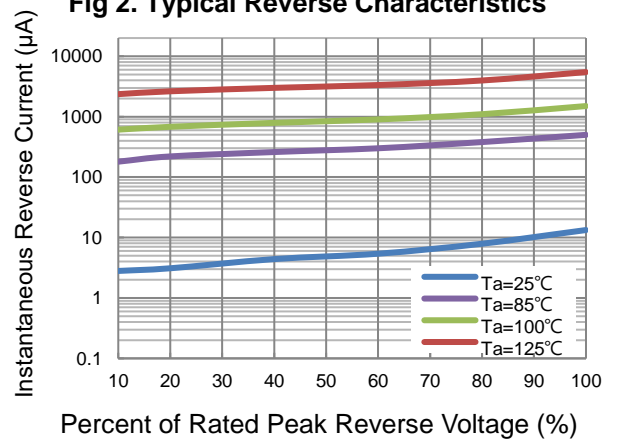


Fig 3. Typical Forward Current Derating Curve

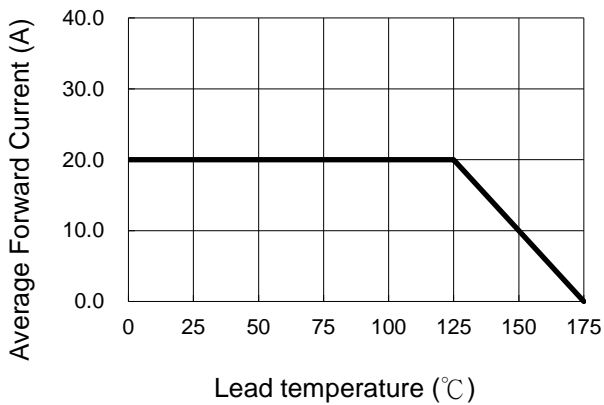
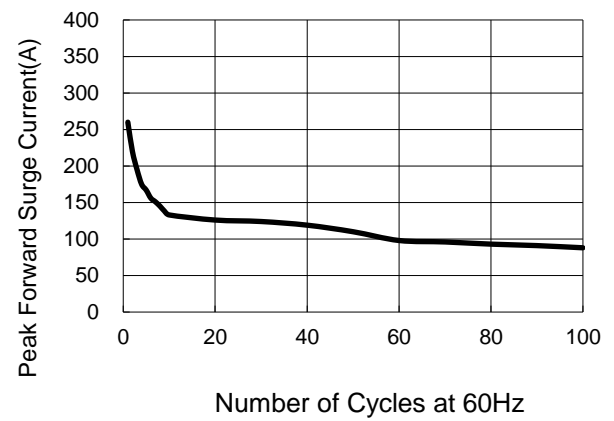


Fig 4. Non-repetitive Forward Surge Current



Package Outline Dimensions (in millimeters)

