

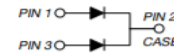
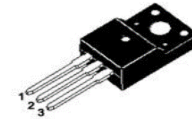
FEATURES AND BENEFITS

- 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: TO-220AB Package
- Terminals: Matte Tin annealed over copper
- Weight: Approximated 2.03 grams

Primary Characteristic	
I_O	2X15A
V_{RRM}	150V
I_{FSM}	200A
V_F Typical= $1.25A, T_J=125^\circ C$	0.47V
T_{Jmax}	175°C



Maximum Ratings ($T_a=25^\circ C$ unless otherwise specified)			
Characteristics	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
DC Blocking Voltage	V_{DC}	150	V
RMS Reverse Voltage	V_{RMS}	105	V
Average Forward Rectified Current (per diode)	I_O	15	Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200	Amps

Electrical Characteristics ($T_a=25^\circ C$ unless otherwise specified)						
Characteristics			Symbol	Typ.	Max.	Unit
Forward Voltage Drop ¹⁾	$I_F=1.25A$	$T_a=25^\circ C$	V_F	0.62	0.66	V
	$I_F=15A$	$T_a=25^\circ C$	V_F	0.78	0.82	V
	$I_F=1.25A$	$T_a=125^\circ C$	V_F	0.47	0.51	V
	$I_F=15A$	$T_a=125^\circ C$	V_F	0.66	0.70	V
Reverse Current ²⁾	$V_R=150V$	$T_a=25^\circ C$	I_R	3	9	μA
	$V_R=150V$	$T_a=125^\circ C$	I_R	5	15	mA

THERMAL CHARACTERISTICS ($T_A = 25^\circ C$ unless otherwise noted)				
Characteristics		Symbol	Value	Unit
Typical Thermal Resistance, junction to case	TO-220AB	$R_{\theta JC}$	2.8	$^\circ C/W$
Typical Thermal Resistance, junction to case	ITO-220AB	$R_{\theta JC}$	4.0	$^\circ C/W$
Operating Temperature Range (in DC Mode)		T_J	-65 to +175	$^\circ C$
Storage Temperature Range		T_{STG}	-65 to +150	$^\circ C$

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

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

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

RATINGS AND CHARACTERISTICS CURVES

Fig 1. Typical Forward Characteristics

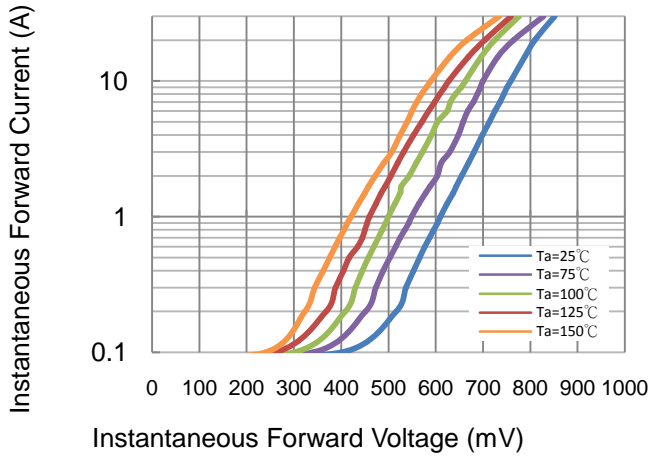


Fig 2. Typical Reverse Characteristics

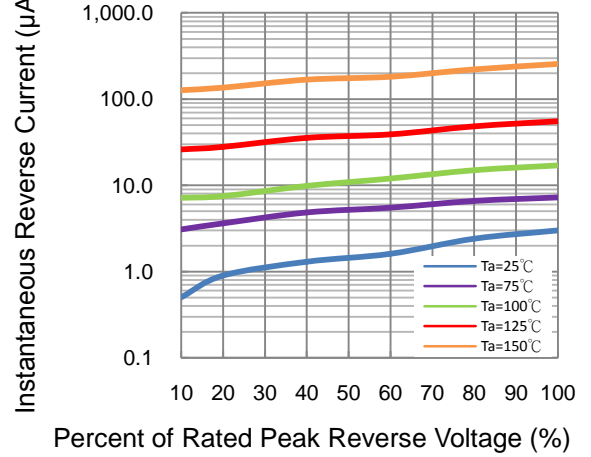


Fig 3. Typical Forward Current Derating Curve

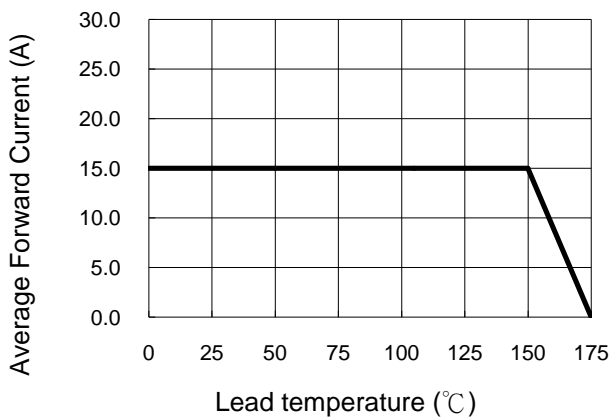
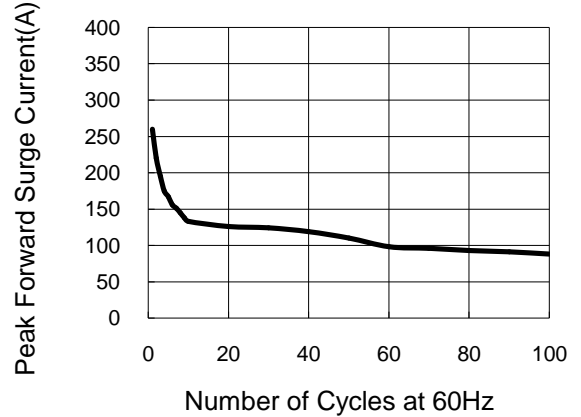


Fig 4. Non-repetitive Forward Surge Current



Package Outline Dimensions (in millimeters)

