

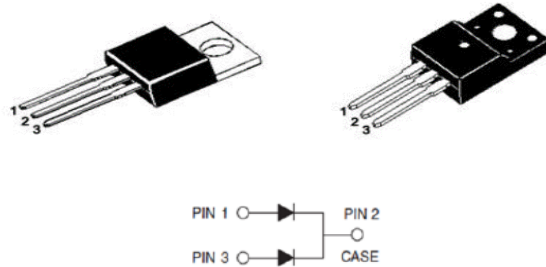
FEATURES AND BENEFITS

- 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	2X15A
V_{RRM}	150V
I_{FSM}	180A
V_F Typical=1.25A, $T_J=125^\circ\text{C}$	0.40V
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}	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}	180	Amps		
Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)					
Characteristics	Symbol	Typ.	Max.	Unit	
Forward Voltage Drop ¹⁾	$I_F=1.25\text{A}$, $T_a=25^\circ\text{C}$	V_F	0.46	0.50	V
	$I_F=15\text{A}$, $T_a=25^\circ\text{C}$	V_F	1.18	1.22	V
	$I_F=1.25\text{A}$, $T_a=125^\circ\text{C}$	V_F	0.40	0.44	V
	$I_F=15\text{A}$, $T_a=125^\circ\text{C}$	V_F	0.70	0.74	V
Reverse Current ²⁾	$V_R=150\text{V}$, $T_a=25^\circ\text{C}$	I_R	8	25	μA
	$V_R=150\text{V}$, $T_a=125^\circ\text{C}$	I_R	3	10	mA

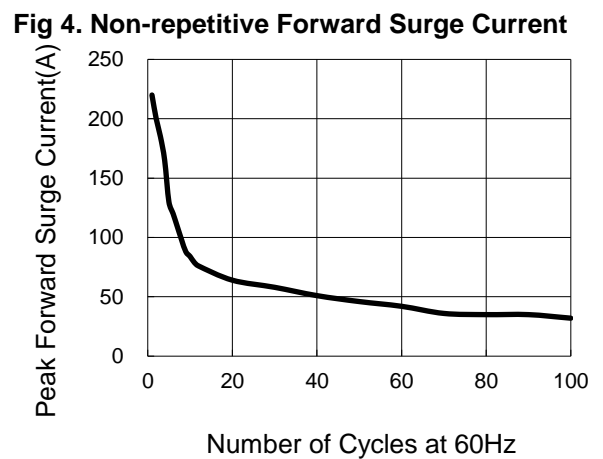
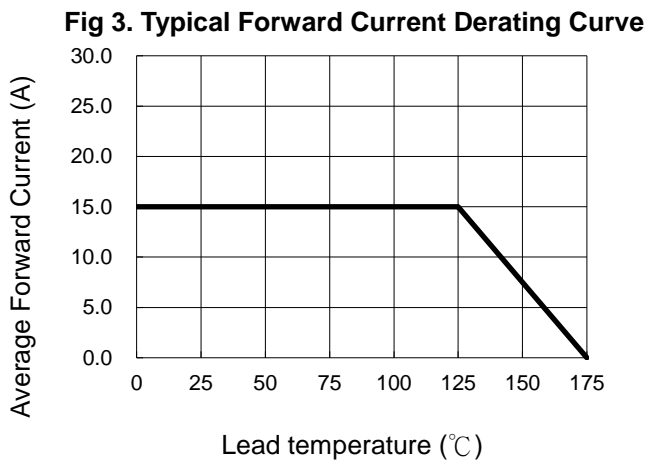
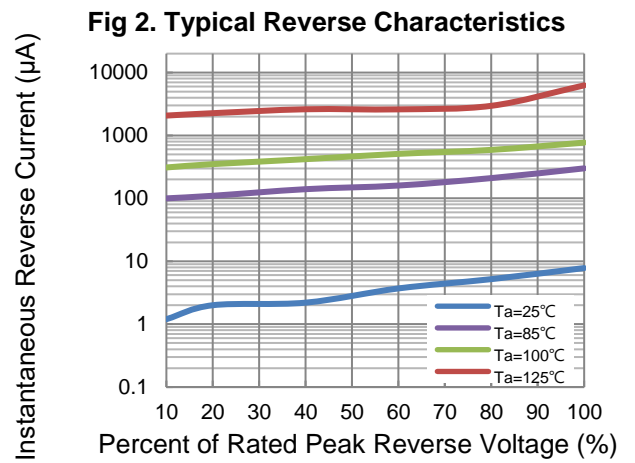
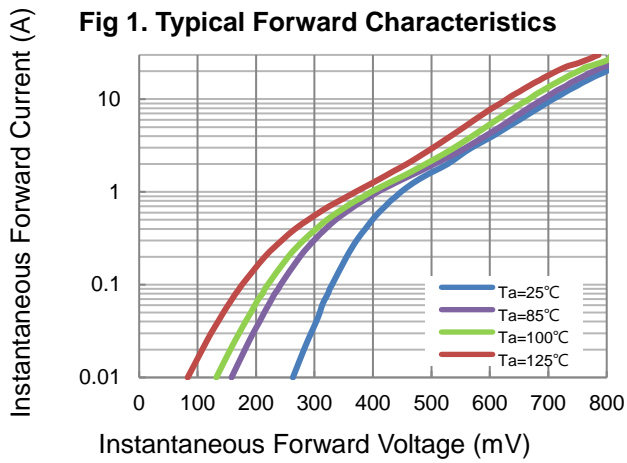
THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)				
Characteristics	Symbol	Value	Unit	
Typical Thermal Resistance, junction to case	TO-220AB	$R_{\theta JC}$	2.8	$^\circ\text{C/W}$
Typical Thermal Resistance, junction to case	ITO-220AB	$R_{\theta JC}$	4.0	$^\circ\text{C/W}$
Operating 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 $\leq 40\text{ms}$

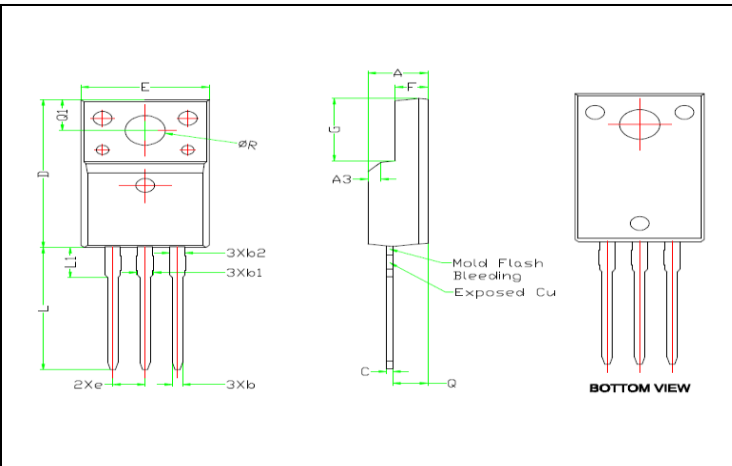
Notes (3): FR-4 PCB, 2oz copper. Minimum recommended pad layout

RATINGS AND CHARACTERISTICS CURVES



Package Outline Dimensions (in millimeters)

ITO-220				
SYMBOL	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	4.60	4.80	0.18	0.19
b	0.70	0.91	0.03	0.04
b1	1.20	1.47	0.05	0.06
b2	1.10	1.30	0.04	0.05
C	0.45	0.63	0.02	0.02
D	15.80	15.97	0.62	0.63
e	2.29	2.79	0.09	0.11
E	10.00	10.30	0.39	0.41
F	2.44	2.64	0.10	0.10
G	6.50	6.90	0.26	0.27
L	12.90	13.30	0.51	0.52
L1	3.13	3.33	0.12	0.13
Q	2.65	2.85	0.10	0.11
Q1	3.20	3.40	0.13	0.13
ΦR	3.08	3.28	0.12	0.13



The technical drawings illustrate the package geometry. The top view shows a rectangular body with a central circular feature of diameter ΦR and three leads extending from the bottom. Dimensions include E (total width), 2Xe (lead spacing), 3xb (lead width), 3xb1 and 3xb2 (lead thicknesses), and H (body height). The side view shows dimensions A (total height), F (lead height), A3 (lead thickness), C (lead length), and Q (lead diameter). The bottom view shows the lead arrangement and labels 'Mold Flash Bleeding' and 'Exposed Cu'.