

Dual Common-Cathode Ultra Low VF Schottky Rectifier

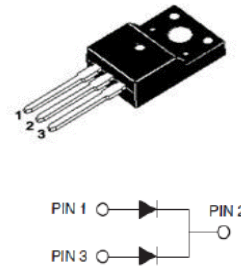
FEATURES AND BENEFITS

- 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	2X5A
V_{RRM}	60V
I_{FSM}	100A
V_F Max=5A, $T_J=25^\circ\text{C}$	0.60V
T_{Jmax}	150°C



Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise specified)			
Characteristics	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
DC Blocking Voltage	V_{DC}	60	V
RMS Reverse Voltage	V_{RMS}	42	V
Average Forward Rectified Current (per diode)	I_O	5	Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100	Amps

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)						
Characteristics			Symbol	Typ.	Max.	Unit
Forward Voltage Drop	IF=2.5A	$T_a=25^\circ\text{C}$	V_F	-	0.52	V
	IF=5A	$T_a=25^\circ\text{C}$	V_F	-	0.60	V
	IF=2.5A	$T_a=125^\circ\text{C}$	V_F	-	0.45	V
	IF=5A	$T_a=125^\circ\text{C}$	V_F	-	0.56	V
Reverse Current	VR=60V	$T_a=25^\circ\text{C}$	I_R	-	100	μA
	VR=60V	$T_a=125^\circ\text{C}$	I_R	-	20	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 +150	$^\circ\text{C}$
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

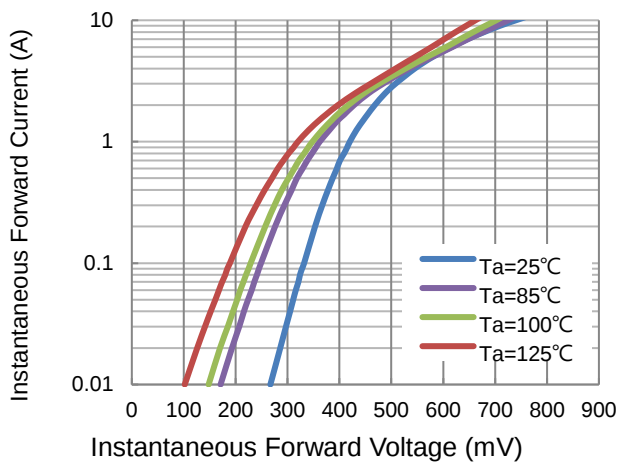


Fig 2. Typical Reverse Characteristics

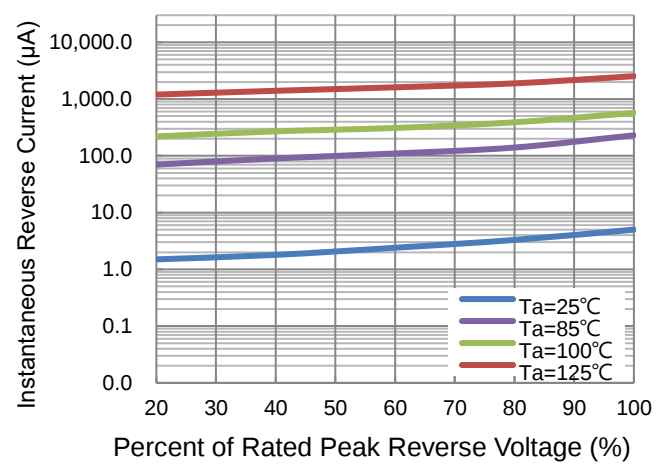


Fig 3. Typical Forward Current Derating Curve

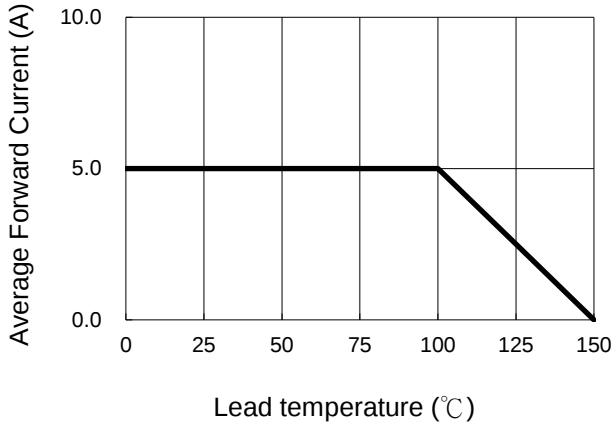
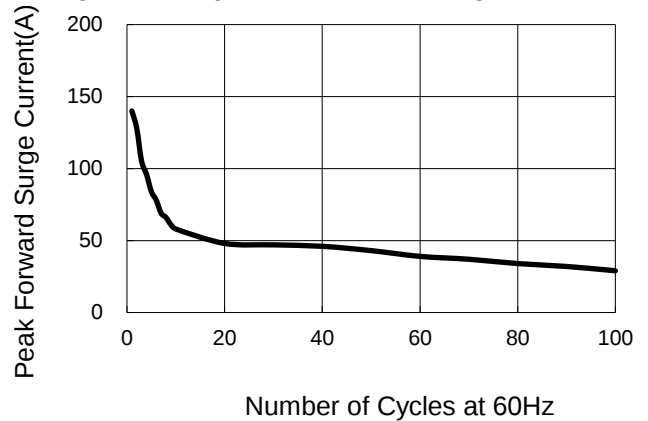
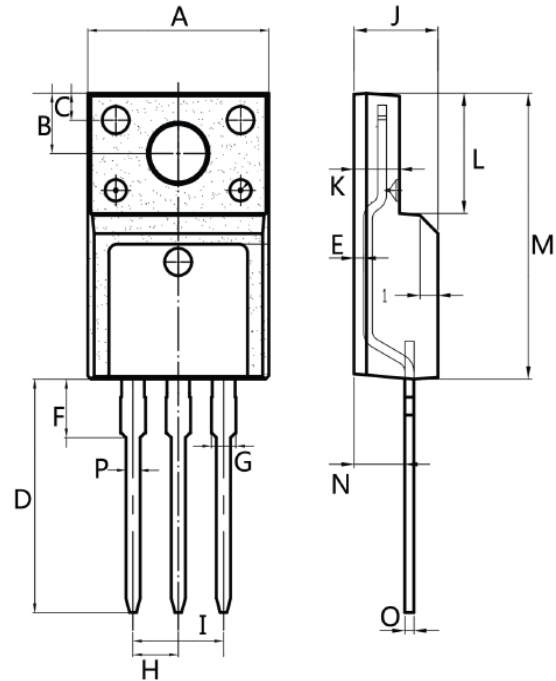


Fig 4. Non-repetitive Forward Surge Current

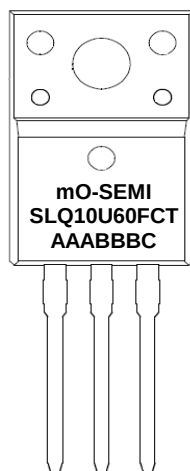


Package Outline Dimensions (in millimeters)

ITO-220				
SYMBOL	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	9.95	10.30	0.39	0.41
B	2.95	3.40	0.12	0.13
C	1.25	1.45	0.05	0.06
D	12.80	13.30	0.50	0.52
E	0.40	0.60	0.02	0.02
F	2.80	3.50	0.11	0.14
G	1.20	1.47	0.05	0.06
H	2.40	2.70	0.09	0.11
I	4.80	5.40	0.19	0.21
J	4.60	4.80	0.18	0.19
K	2.44	2.65	0.10	0.10
L	6.50	6.90	0.26	0.27
M	15.40	16.00	0.61	0.63
N	2.65	3.05	0.10	0.12
O	0.45	0.63	0.02	0.02
P	0.70	0.91	0.03	0.04



Marking Information



mO-SEMI =Series Name
 SLQ10U60 =Part Number Marking Code
 AAABBC =Product Tracking Code
 *FCT=ITO-220 =Dual ITO-220