

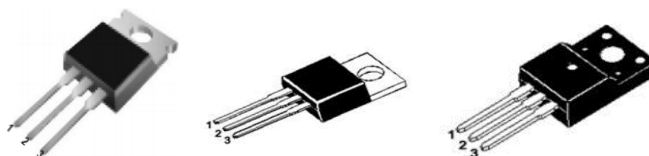
Dual Common-Cathode Ultra Low VF Schottky Rectifier

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



Primary Characteristic	
I_O	2X10A
V_{RRM}	60V
I_{FSM}	170A
V_F Typical=1.5A, $T_J=125^\circ\text{C}$	0.28V
T_{Jmax}	150 °C

Maximum Ratings (Ta=25°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	10		Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)			I _{FSM}	170		Amps
Electrical Characteristics (Ta=25°C unless otherwise specified)						
Characteristics			Symbol	Typ.	Max.	Unit
Forward Voltage Drop	IF=1.5A	Ta=25°C	V _F	0.41	0.45	V
	IF=10A	Ta=25°C	V _F	0.52	0.56	V
	IF=1.5A	Ta=125°C	V _F	0.28	0.32	V
	IF=10A	Ta=125°C	V _F	0.48	0.52	V
Reverse Current	VR=60V	Ta=25°C	I _R	10	30	μA
	VR=60V	Ta=125°C	I _R	5	15	mA

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

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

Notes (2): Pulse width ≤ 40ms

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

RATINGS AND CHARACTERISTICS CURVES

Fig 1. Typical Forward Characteristics

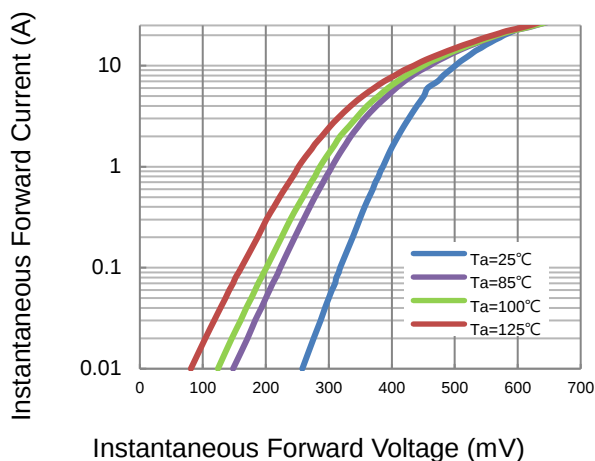


Fig 2. Typical Reverse Characteristics

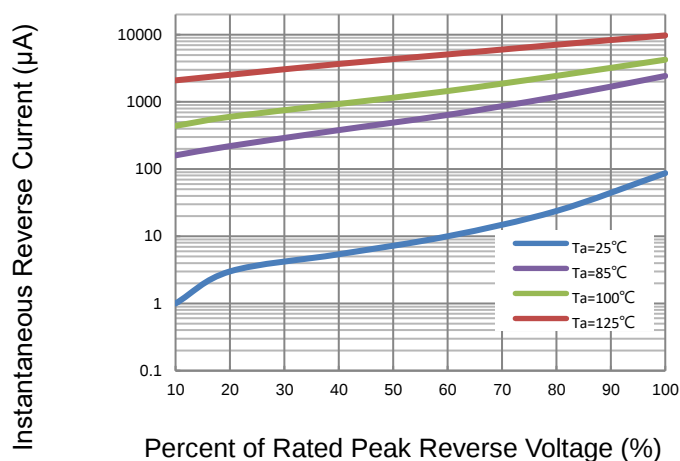


Fig 3. Typical Forward Current Derating Curve

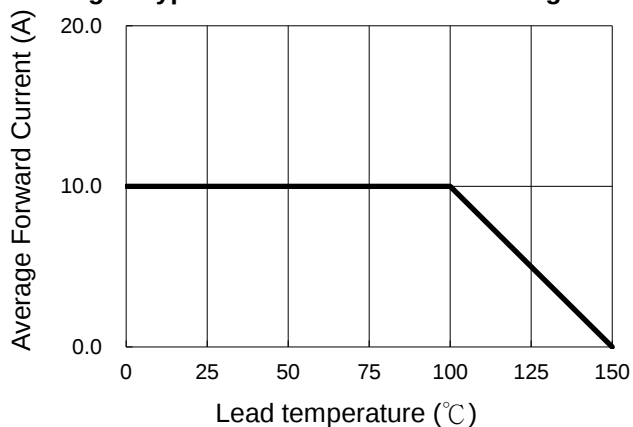
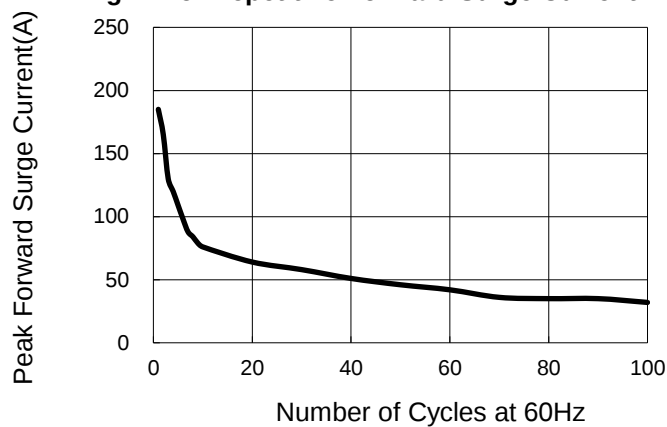


Fig 4. Non-repetitive Forward Surge Current



Marking Information

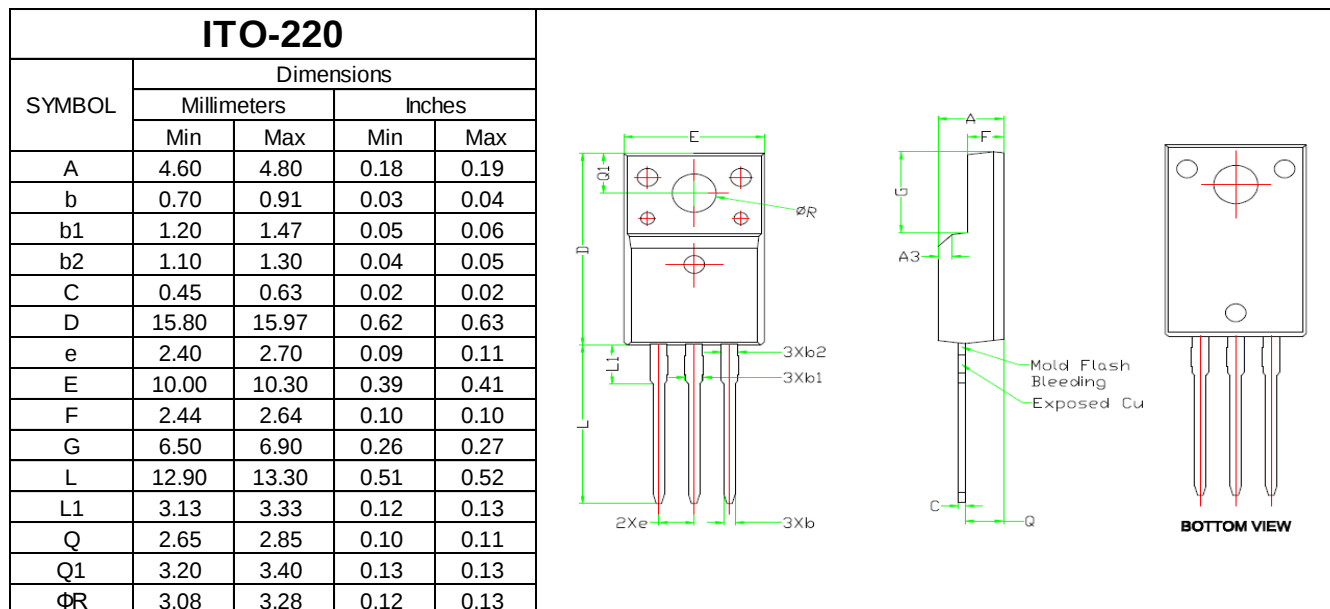
mO-SEMI
SLT20L60CT
AAABBBC

mO-SEMI
SLT20L60FCT
AAABBBC

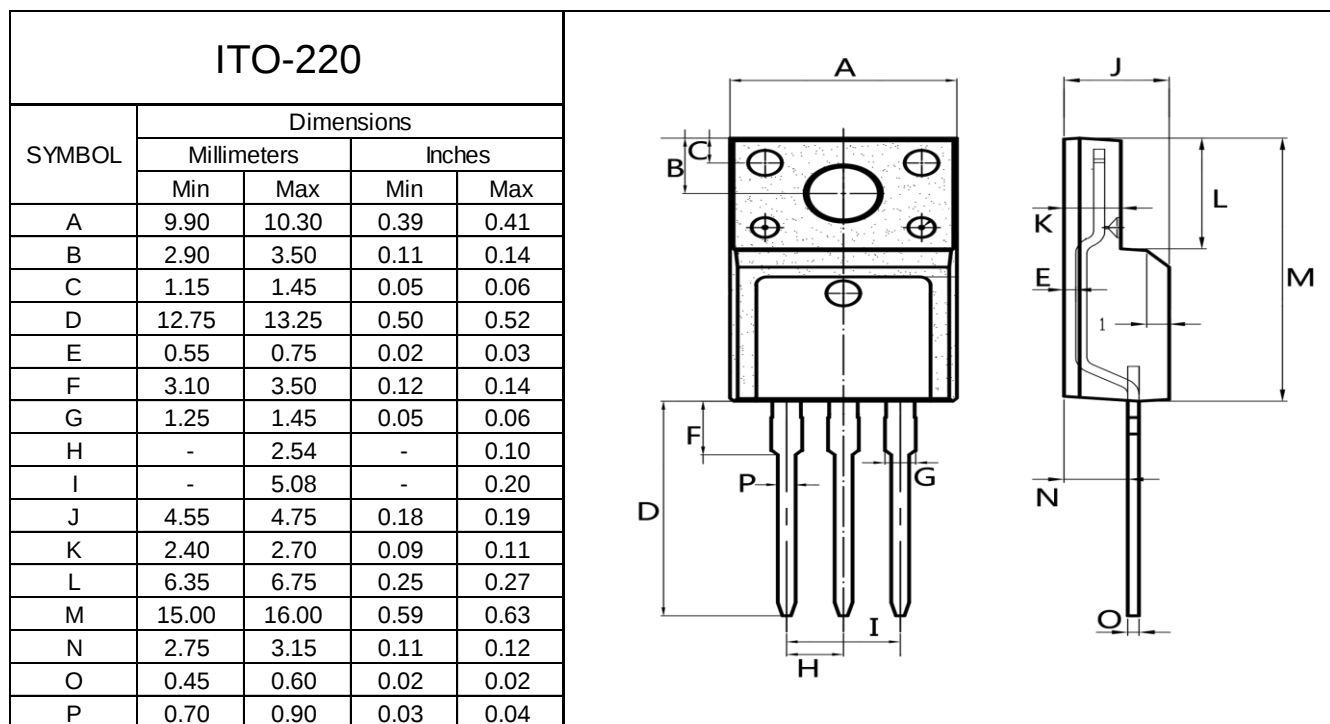
mO-SEMI =Series Name
SLT20L60 =Part Number Marking Code
AAABBBC =Product Tracking Code
*FCT=ITO-220 =Dual ITO-220
*CT=TO-220 =Dual TO-220

Package Outline Dimensions (in millimeters)

ITO-220 (Type 1)

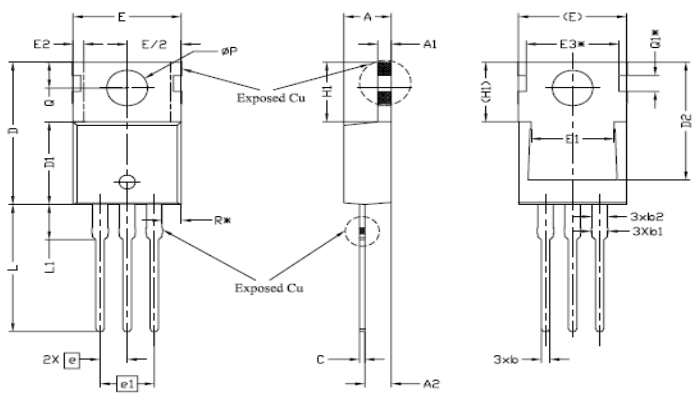


ITO-220 (Type 2)



TO-220 (Type 1)

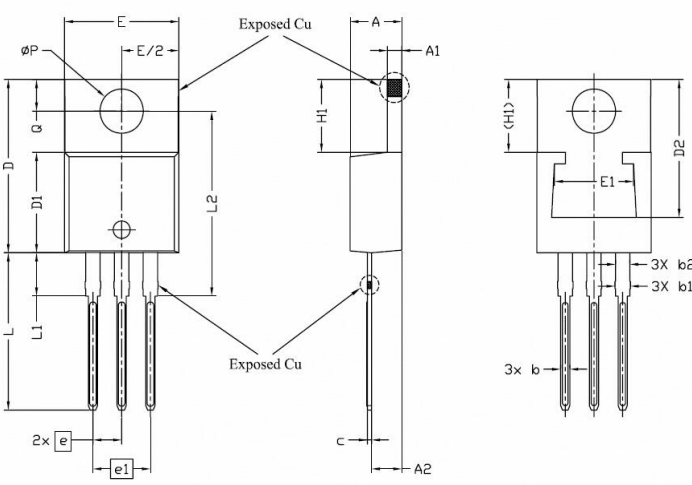
TO-220				
SYMBOL	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	4.24	4.64	0.17	0.18
A1	1.15	1.40	0.05	0.06
A2	2.30	2.70	0.09	0.11
b	0.70	0.90	0.03	0.04
b1	1.20	1.75	0.05	0.07
b2	1.20	1.70	0.05	0.07
c	0.40	0.60	0.02	0.02
D	14.70	16.00	0.58	0.63
D1	8.82	9.02	0.35	0.36
D2	12.43	12.83	0.49	0.51
E	9.96	10.36	0.39	0.41
E1	6.86	8.89	0.27	0.35
E2	-	0.76	-	0.03
E3*	8.7REF.			
e	2.54BSC			
e1	5.08BSC			
H1	6.30	6.60	0.25	0.26
L	13.47	13.97	0.53	0.55
L1	3.60	4.00	0.14	0.16
ΦP	3.75	3.93	0.15	0.15
Q	2.60	3.00	0.10	0.12
Q1*	1.73REF.			
R*	1.82REF.			



The mechanical drawing of TO-220 (Type 1) includes three views: front, side, and top. The front view shows the package body with dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, ΦP, Q, Q1*, and R*. The side view shows the package height and dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, ΦP, Q, Q1*, and R*. The top view shows the package footprint with dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, ΦP, Q, Q1*, and R*.

TO-220 (Type 2)

TO-220				
SYMBOL	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	3.56	4.82	0.14	0.19
A1	0.51	1.39	0.02	0.05
A2	2.04	2.92	0.08	0.11
b	0.39	1.01	0.02	0.04
b1	1.15	1.82	0.05	0.07
b2	1.15	1.77	0.05	0.07
c	0.04	0.50	0.00	0.02
D	14.22	16.51	0.56	0.65
D1	8.39	9.01	0.33	0.35
D2	11.45	12.87	0.45	0.51
E	9.66	10.66	0.38	0.42
E1	6.86	8.89	0.27	0.35
e	2.54BSC		2.54BSC	
e1	5.08BSC		5.08BSC	
H1	5.85	6.85	0.23	0.27
L	12.70	14.73	0.50	0.58
L1	-	6.35	-	0.25
L2	15.80	16.20	0.62	0.64
ΦP	3.54	4.08	0.14	0.16
Q	2.54	3.42	0.10	0.13



The mechanical drawing of TO-220 (Type 2) includes three views: front, side, and top. The front view shows the package body with dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, L2, ΦP, Q, Q1*, and R*. The side view shows the package height and dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, L2, ΦP, Q, Q1*, and R*. The top view shows the package footprint with dimensions A, A1, A2, b, b1, b2, c, D, D1, D2, E, E1, E2, E3*, e, e1, H1, L, L1, L2, ΦP, Q, Q1*, and R*.