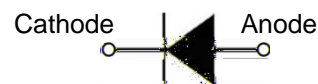
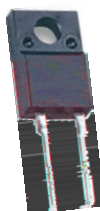


### Features

- 
- 
- 
- 
- RoHS Compliant
- JEDEC Qualification

### Applications

- General Rectification



Device	Package	Marking	Remark
TDPF30B60	TO-220F-2L	TDPF30B60	RoHS

### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V
Reverse Blocking Voltage	$V_R$	600	V
Average Rectified Forward Current	$I_{F(AV)}$	30	A
Non-Repetitive Peak Surge Current 60Hz Single Half Sine Wave	$I_{FSM}$	300	A
Storage Temperature Range	$T_{STG}$	-55 ~ 150	

### Thermal Characteristics

Parameter	Symbol	Value	Unit
Maximum Thermal Resistance, Junction-to-Case	$\theta$	1.5	/W

### Electrical Characteristics $T_C=25^\circ\text{C}$ , unless otherwise noted

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit	
<b>STATIC</b>							
Forward Voltage Drop	$V_F$	$I_F=30\text{A}, T_C=25^\circ\text{C}$	--	1.5	2.0	V	
		$I_F=30\text{A}, T_C=150^\circ\text{C}$	--	1.4	1.9	V	
Reverse Leakage Current	$I_R$	$V_R=600\text{V}$	--	--	100		
<b>DYNAMIC</b>							
Reverse Recovery Time	$t_{rr}$	$V_R=400\text{V}, I_F=30\text{A}, di/dt=200\text{A}/\mu\text{s}$	$T_C=25^\circ\text{C}$	--	85	--	ns
			$T_C=150^\circ\text{C}$	--	190	--	
Reverse Recovery Current	$I_{RC}$		$T_C=25^\circ\text{C}$	--	--	--	
			$T_C=150^\circ\text{C}$	--	1600	--	

Fig.1 Forward voltage drop vs. Forward current

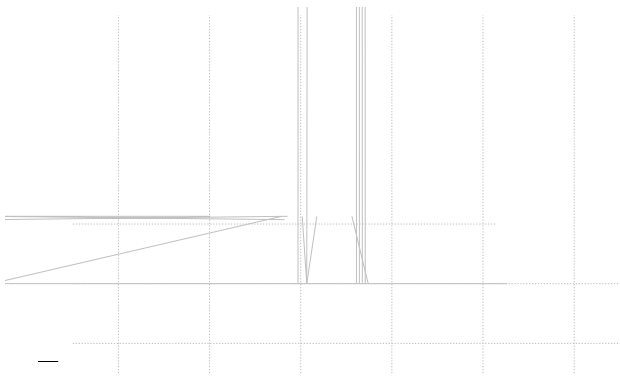


Fig 2. Reverse voltage vs. Reverse current

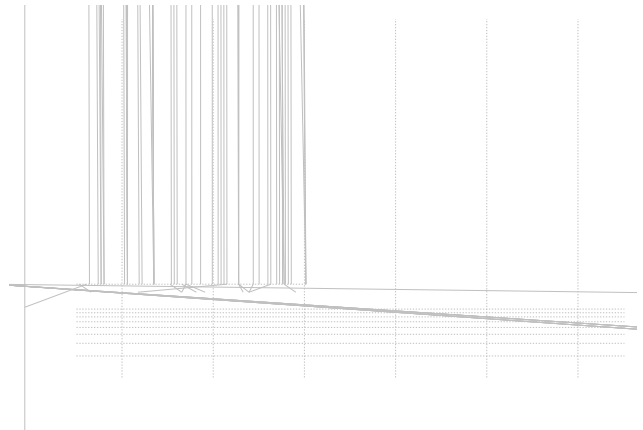


Fig 3. Junction capacitance

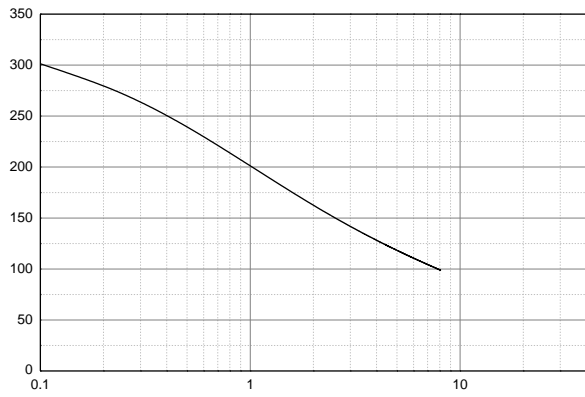


Fig 4. Reverse recovery time vs. di/dt



Fig 5. Reverse recovery current vs. di/dt

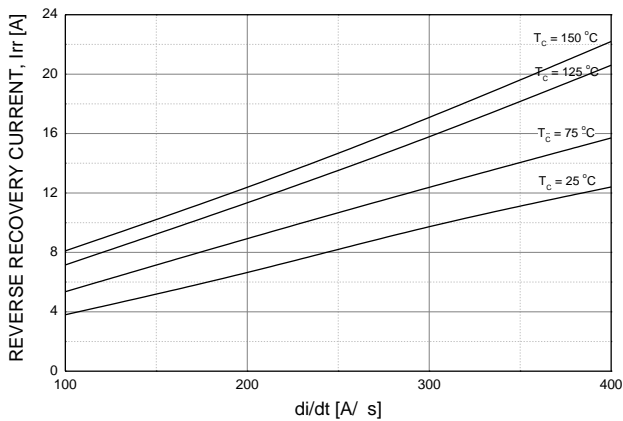
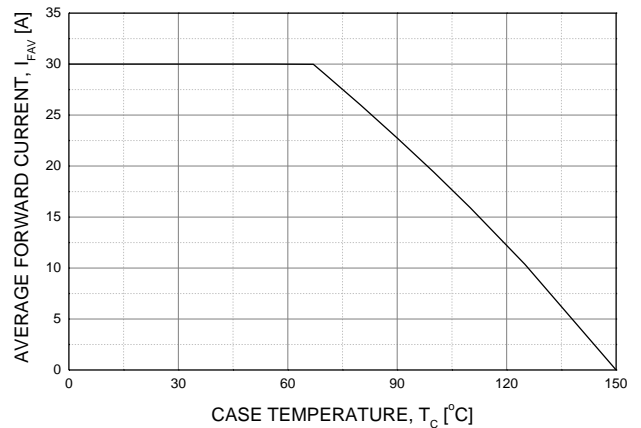
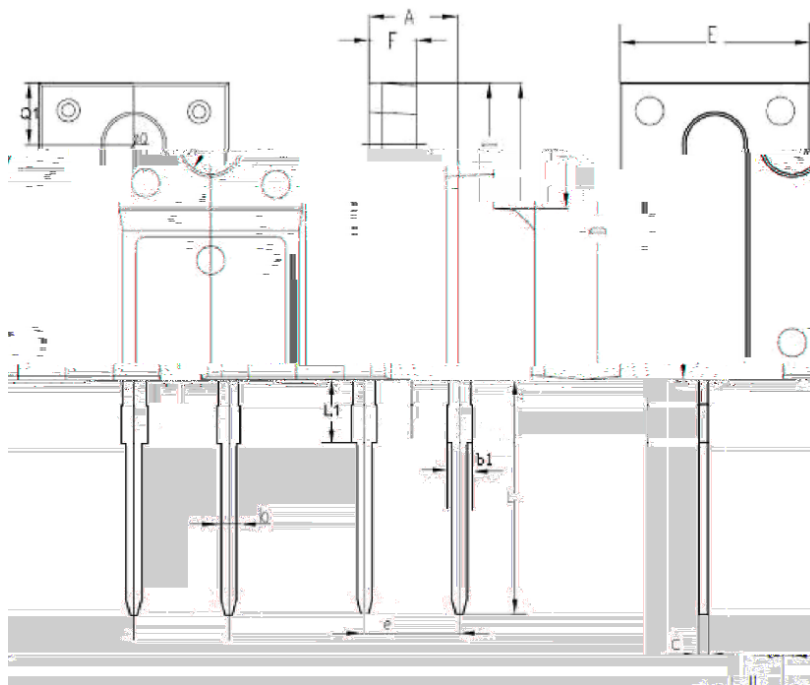


Fig 6. Case temperature vs. Forward current



**TO-220F-2L MECHANICAL DATA**


SYMBOL	MIN	MAX
A	4.50	4.93
b	0.70	0.91
b1	1.15	1.47
C	0.45	0.60
D	15.67	16.07
E	9.96	10.36
e	5.08 BSC	
F	2.34	2.74
G	6.48	6.90
L	12.78	13.18
L1	2.90	3.38
Q	2.56	2.96
Q1	3.10	3.50
ØP	2.98	3.38

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