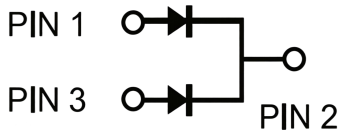
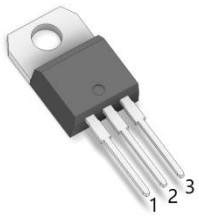
Schottky Barrier Rectifiers

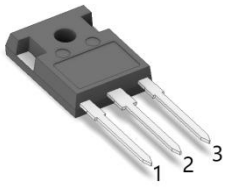
Parameter	Value	Unit
V_{RRM}	100	V
$I_{F(AV)}$	30(2*15)	A



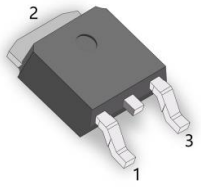


TO-220AB/CT

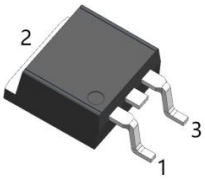
TO-220F/FCT



TO-247/PT



TO-252/CS



TO-263/DC

Features

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses，High efficiency
- Guarding for over voltage protection
- Excellent high temperature stability

Applications

- Power Factor Correction(PFC)
- Switched Mode Power Supply(SMPS)
- Uninterruptible Power Supply(UPS)
- Air Conditioner

Absolute Maximum Ratings(Tc=25℃,unless otherwise noted)

Parameter		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	$I_{F(AV)}$	15	A
	Total		30	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	250	A
Maximum Junction Temperature		T_J	175	°C
Storage Temperature Range		T_{STG}	-40 to +175	°C
Typical Thermal Resistance TO-220AB,TO-263 TO-220F TO-247 TO-252		$R_{\theta JC}$	 2.0 3.5 1.0 2.8	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

Electrical Characteristics unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop			Typ.	Max.	V
I_F=100uA	T_J=25°C	V_R	120	130	
I_F=15A	T_J=25°C	V_F	0.79	0.82	
	T_J=125°C		-	0.72	
V_R=V_{RRM}	T_J=25°C	I_R	0.6	1.0	μA
	T_J=125°C		-	5.0	mA

Note2:Pulse test: 300μs pulse width, 1 % duty cycle

Typical Characteristics

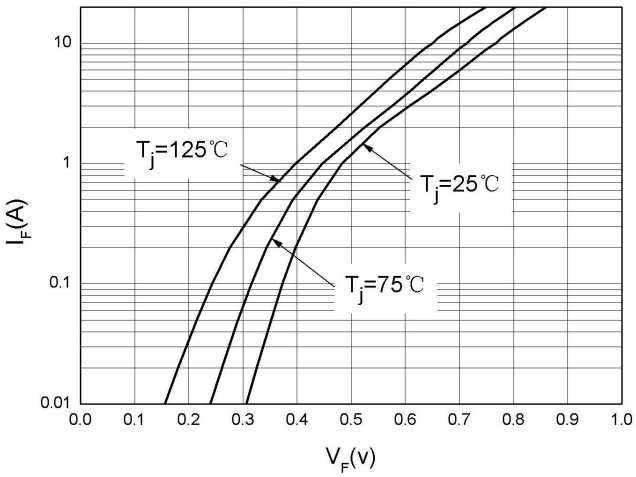


Fig 1.Forward Current versus Forward Voltage

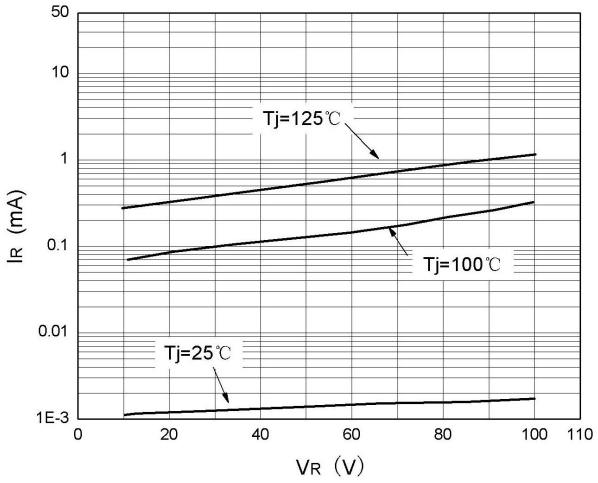


Fig 2.Reverse Current versus Reverse Voltage

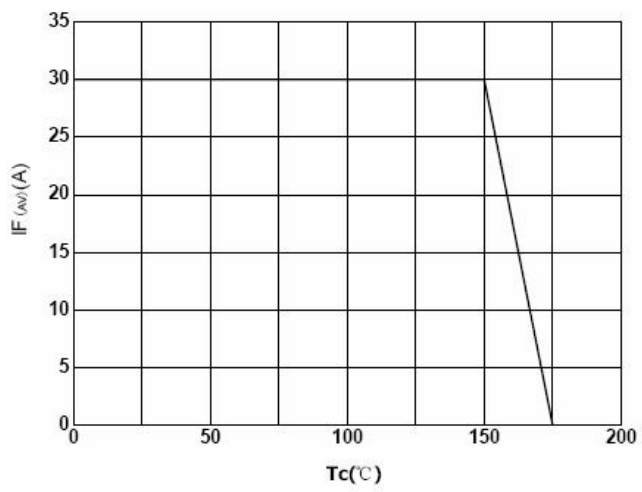


Fig 3.Average Forward Current versus Case Temperature

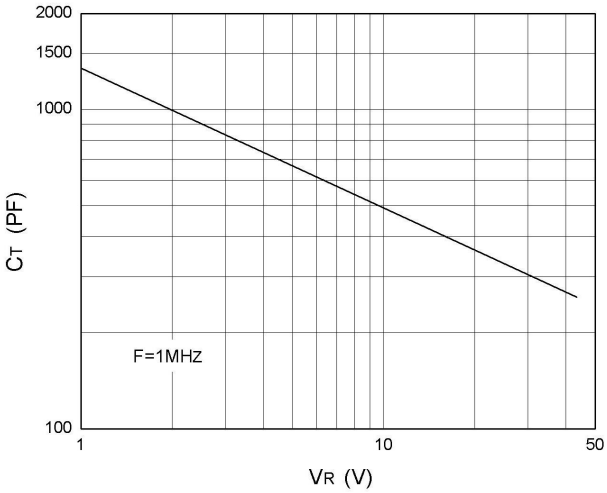
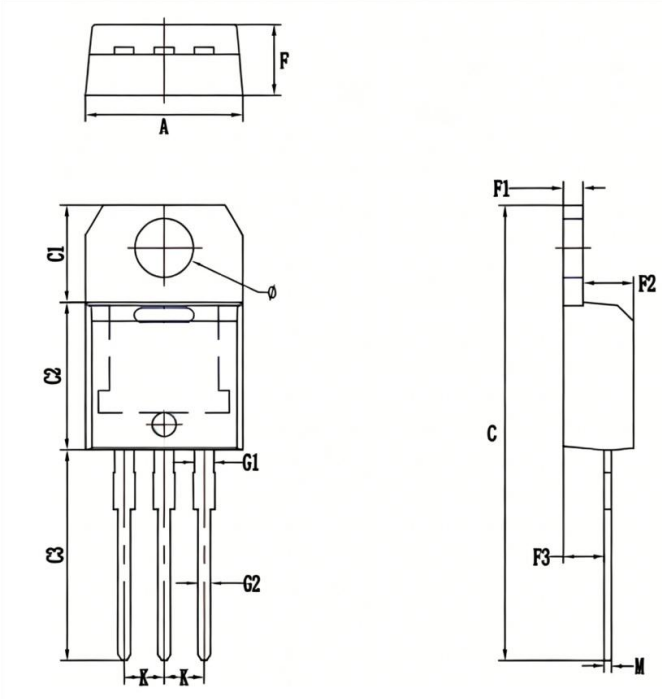


Fig 4.Total Capacitance versus Reverse Voltage

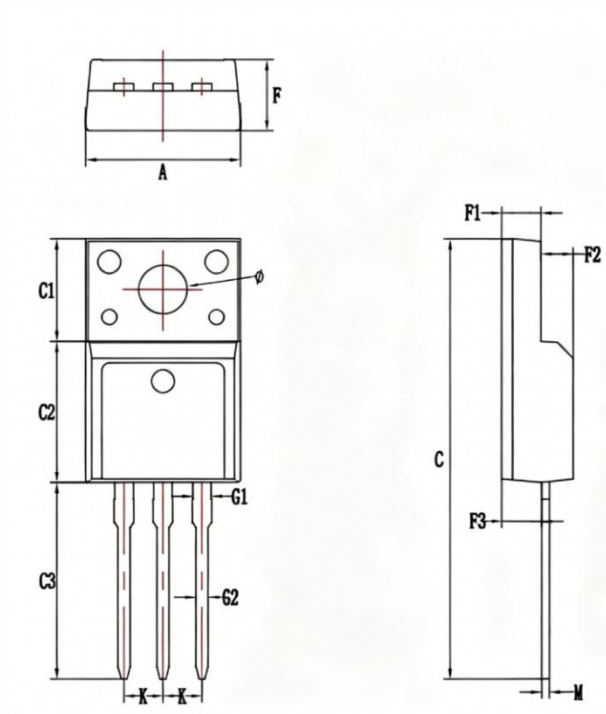
Package Outlines

TO-220AB



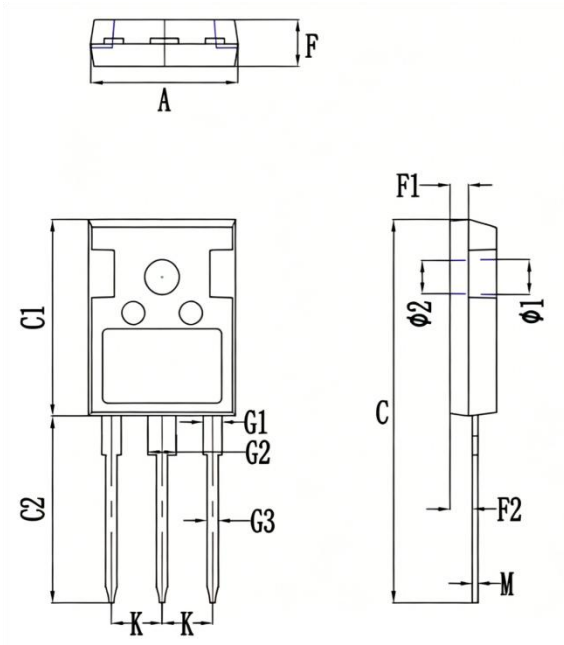
DIMENSIONS(unit:mm)		
Symbol	Min	Max
A	9.900	10.100
C	28.600	29.000
C1	6.100	6.200
C2	9.240	9.440
C3	13.160	13.460
Ø	3.700	3.800
F	4.320	4.620
F1	1.200	1.300
F2	3.120	3.320
F3	2.300	2.700
G1	1.200	1.300
G2	0.750	0.850
K	2.540	
M	0.400	0.500

TO-220F



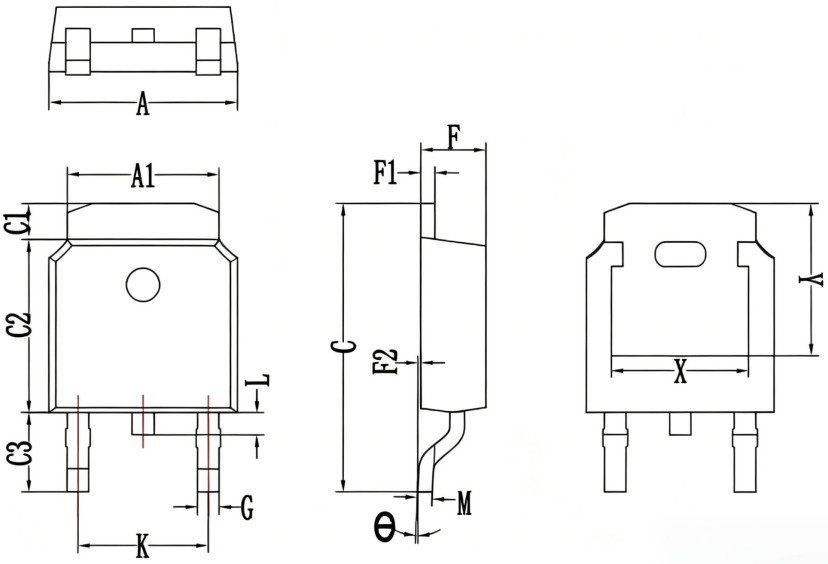
DIMENSIONS(Unit:mm)		
Symbol	Min	Max
A	10.000	10.200
C	28.600	29.100
C1	6.580	6.780
C2	9.120	9.320
C3	12.800	13.100
Ø	3.330	3.430
F	4.450	4.750
F1	2.400	2.600
F2	2.000	2.200
F3	2.300	2.700
G1	1.150	1.250
G2	0.750	0.850
K	2.540	
M	0.450	0.550

TO-247



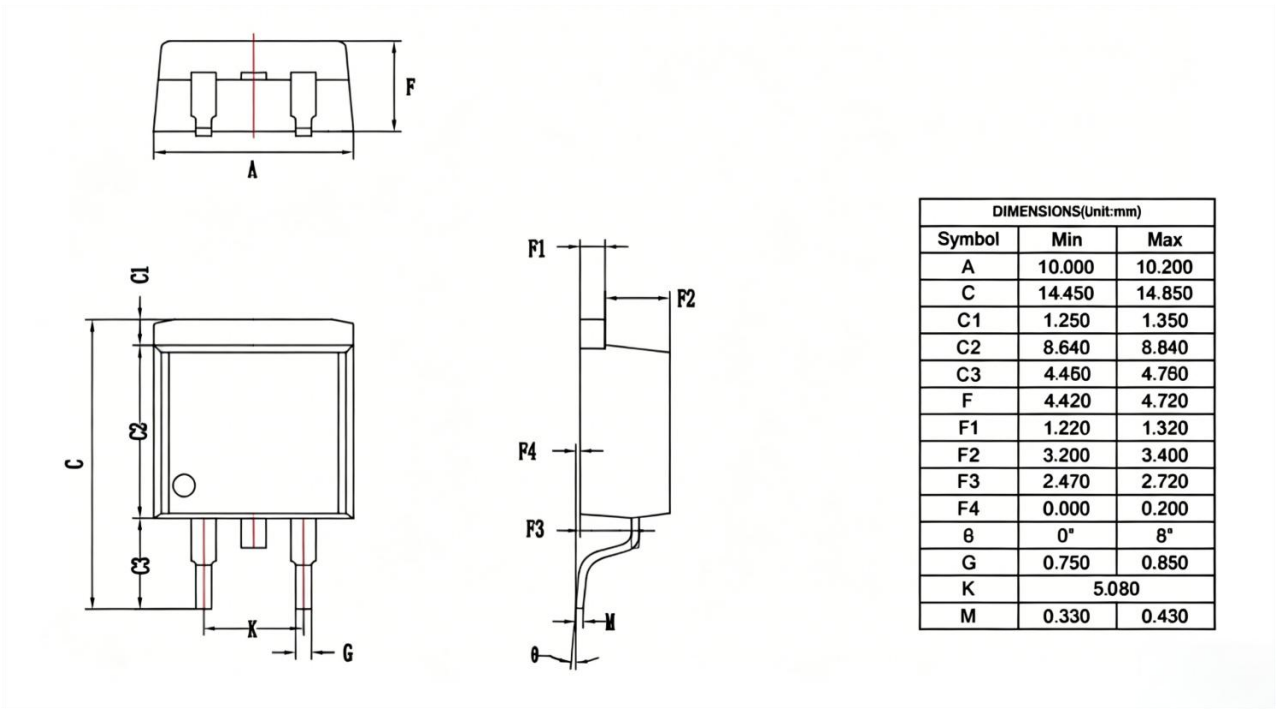
DIMENSIONS(unit:mm)		
Symbol	Min	Max
A	15.650	15.950
C	40.750	41.250
C1	20.850	21.150
C2	19.850	20.150
Ø1	3.700	3.800
Ø2	3.500	3.600
F	4.800	5.200
F1	1.900	2.100
F2	2.200	2.600
G1	1.950	2.050
G2	2.950	3.050
G3	1.150	1.250
K	5.440	
M	0.550	0.650

TO-252



DIMENSIONS(unit:mm)		
Symbol	Min	Max
A	6.500	6.700
A1	5.230	5.430
C	10.000	10.400
C1	1.220	1.320
C2	6.000	6.200
C3	2.700	3.000
F	2.200	2.400
F1	0.450	0.550
F2	0.000	0.100
M	0.450	0.550
K	4.550	4.650
G	0.710	0.810
L	0.600	0.900
θ	0°	5°
X	4.650	4.850
Y	5.250	5.550

TO-263



DIMENSIONS(Unit:mm)		
Symbol	Min	Max
A	10.000	10.200
C	14.450	14.850
C1	1.250	1.350
C2	8.640	8.840
C3	4.460	4.760
F	4.420	4.720
F1	1.220	1.320
F2	3.200	3.400
F3	2.470	2.720
F4	0.000	0.200
θ	0°	8°
G	0.750	0.850
K	5.080	
M	0.330	0.430

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