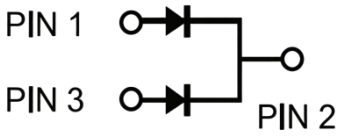
Schottky Barrier Rectifiers

Parameter	Value	Unit
V_{RRM}	150	V
$I_{F(AV)}$	40(2*20)	A



Features

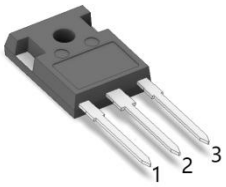
- Common cathode structure
- Low power consumption, high efficiency
- Good high-temperature characteristics
- Over voltage protection loop, high reliability

TO-220AB/CT

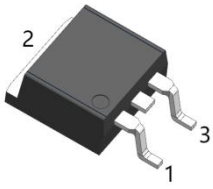
TO-220F/FCT

Applications

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



TO-247/PT



TO-263/DC

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

Parameter		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	150	V
Working Peak Reverse Voltage		V_{RWM}	150	V
Maximum DC Blocking Voltage		V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	$I_{F(AV)}$	20	A
	Total		40	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	400	A
Maximum Junction Temperature		T_J	175	°C
Storage Temperature Range		T_{STG}	-40 to +150	°C
Typical Thermal Resistance TO-220AB,TO-263 TO-220F TO-247		$R_{\theta JC}$	 2.0 3.5 1.0	°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	190	205	
I_F=20A	T_J=25°C	V_F	0.84	0.88	
	T_J=125°C		-	0.78	
V_R=V_{RRM}	T_J=25°C	I_R	1.0	5.0	μA
	T_J=125°C		-	5.0	mA

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

Typical Characteristics

Fig 1. IF VS VF

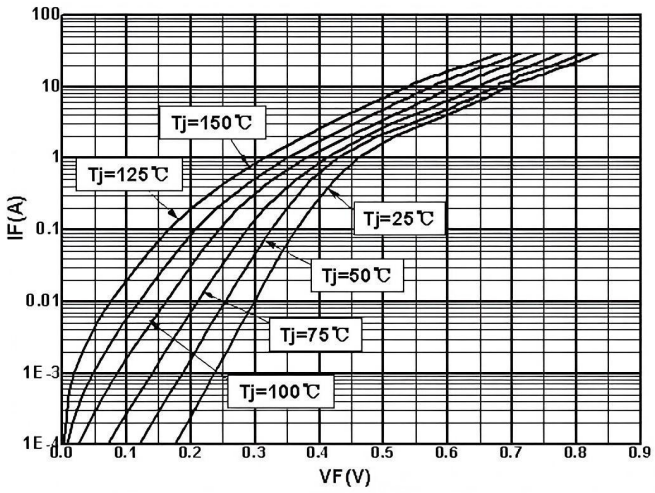


Fig 2. IR VS VR

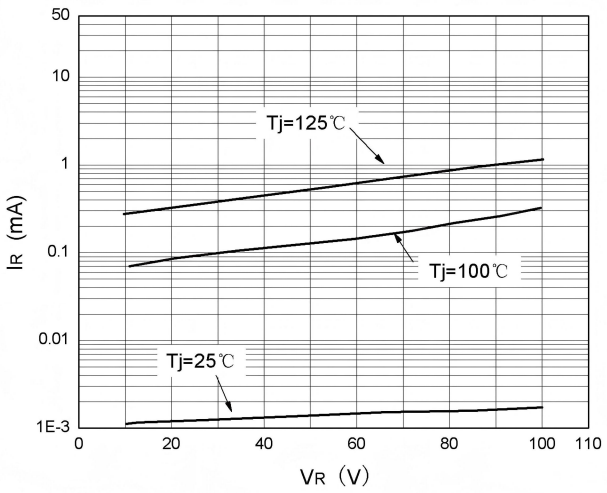


Fig 3. IF(AV) vs TC

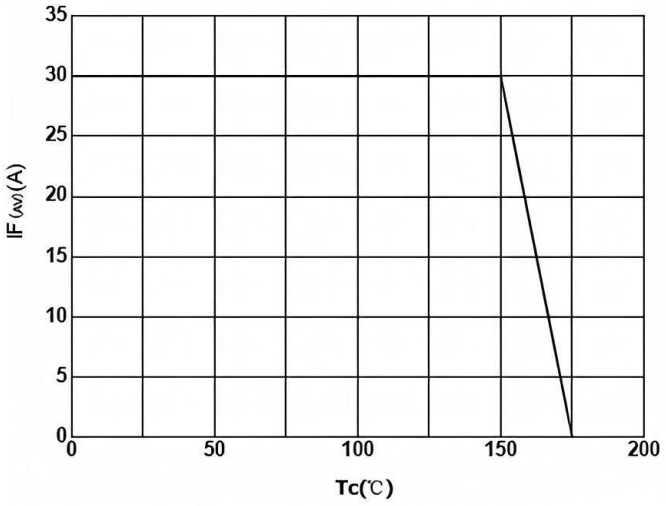
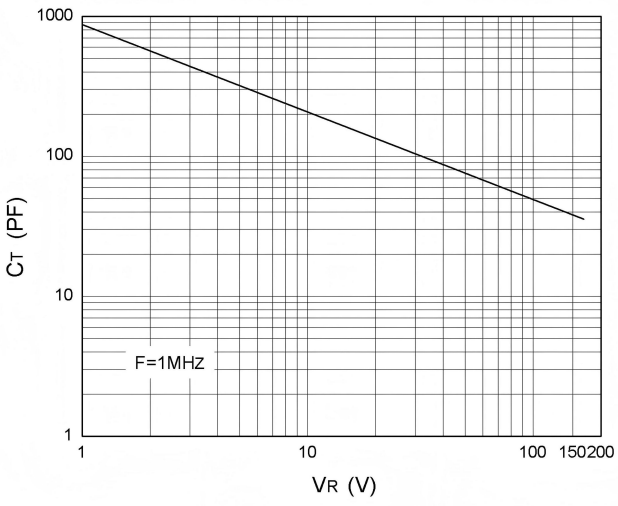
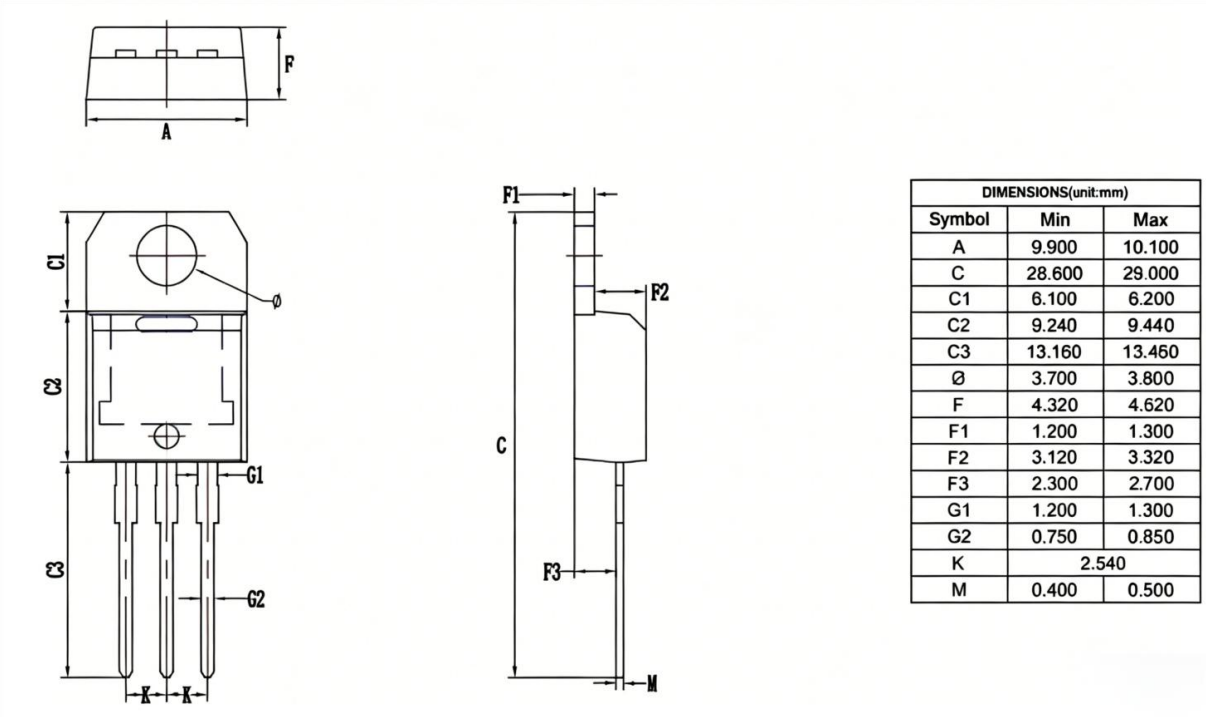


Fig 4. CT vs VR



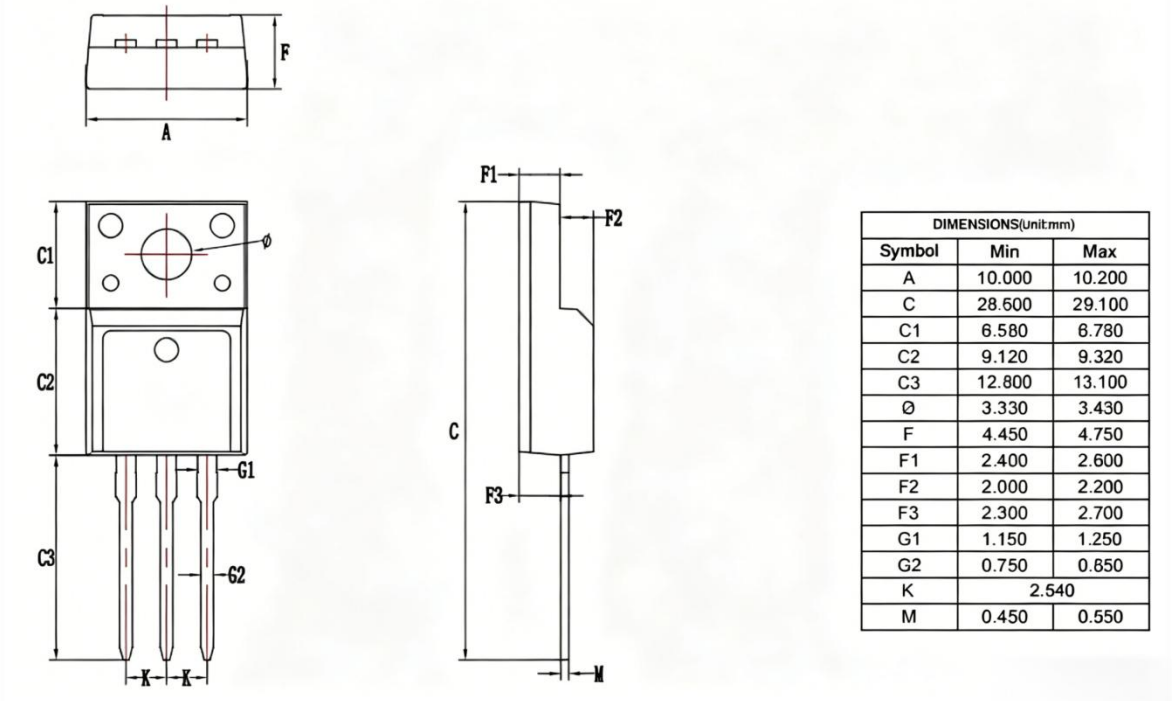
Package Outlines

TO-220AB



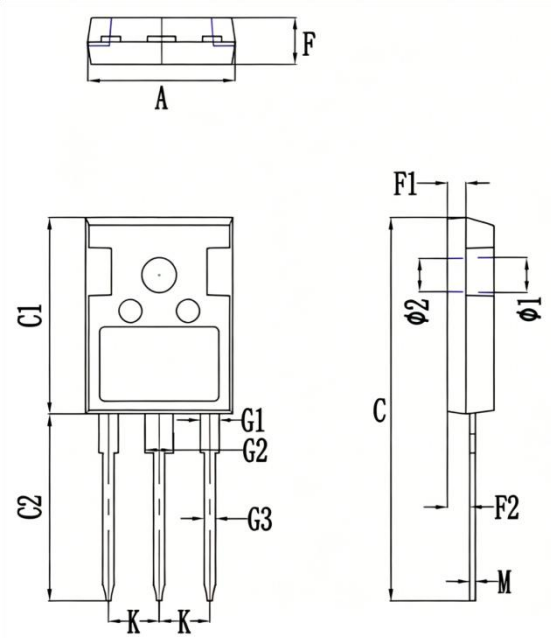
DIMENSIONS(unit:mm)		
Symbol	Min	Max
A	9.900	10.100
C	28.600	29.000
C1	6.100	6.200
C2	9.240	9.440
C3	13.160	13.460
Ø	3.700	3.800
F	4.320	4.620
F1	1.200	1.300
F2	3.120	3.320
F3	2.300	2.700
G1	1.200	1.300
G2	0.750	0.850
K	2.540	
M	0.400	0.500

TO-220F



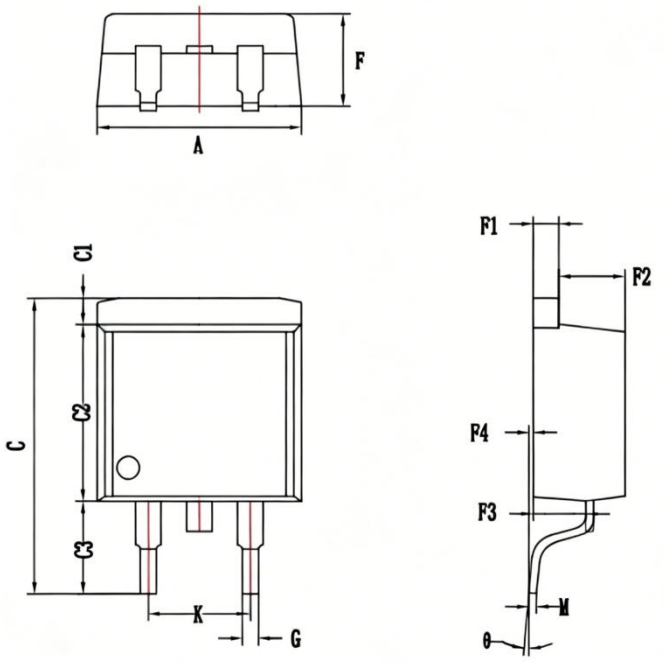
DIMENSIONS(Unit:mm)		
Symbol	Min	Max
A	10.000	10.200
C	28.600	29.100
C1	6.580	6.780
C2	9.120	9.320
C3	12.800	13.100
Ø	3.330	3.430
F	4.450	4.750
F1	2.400	2.600
F2	2.000	2.200
F3	2.300	2.700
G1	1.150	1.250
G2	0.750	0.850
K	2.540	
M	0.450	0.550

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-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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