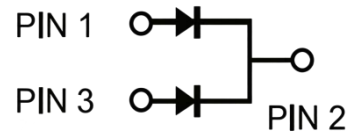


Schottky Barrier Rectifiers

Parameter	Value	Unit
V_{RRM}	100	V
$I_{F(AV)}$	10(2*5)	A

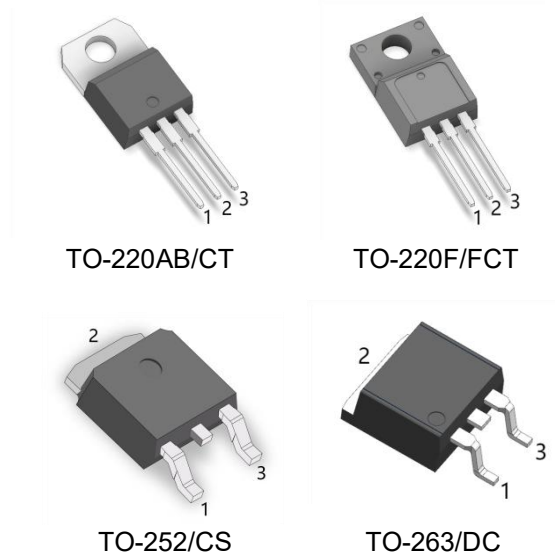


Features

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

Applications

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



Absolute Maximum Ratings ($T_c=25^\circ\text{C}$, 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	5	A
	Total	10	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	85	A
Maximum Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$
Typical Thermal Resistance TO-220AB, TO-263 TO-220F TO-252	$R_{\theta JC}$	2.2	$^\circ\text{C/W}$
		3.5	
		3.0	

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.	
$I_F=100\mu A$	$T_J=25^\circ C$	V_R	125	-	V
$I_F=5A$	$T_J=25^\circ C$	V_F	0.78	0.84	
	$T_J=125^\circ C$		0.66	0.7	
$V_R=V_{RRM}$	$T_J=25^\circ C$	I_R	0.2	1.0	μA
	$T_J=125^\circ C$		-	5.0	mA

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

Typical Characteristics

Fig 1. I_F VS V_F

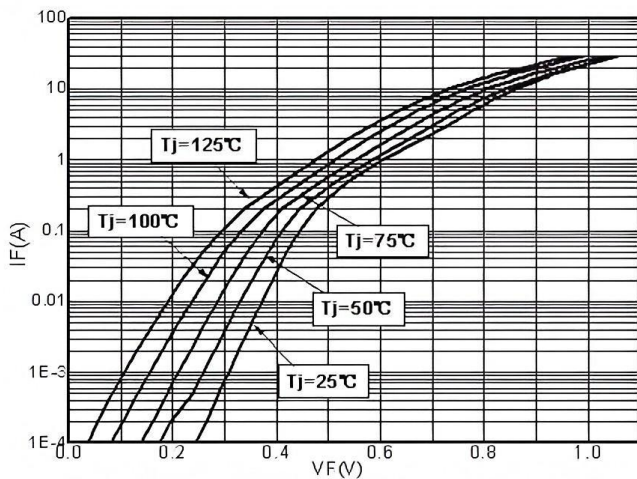


Fig 3. $I_F(AV)$ vs T_C

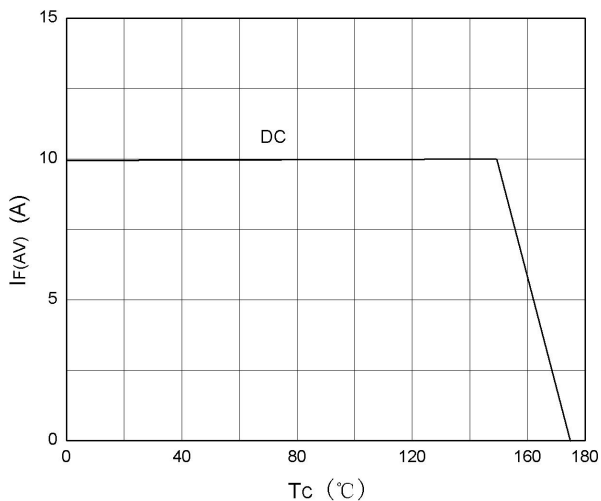


Fig 2. I_R VS V_R

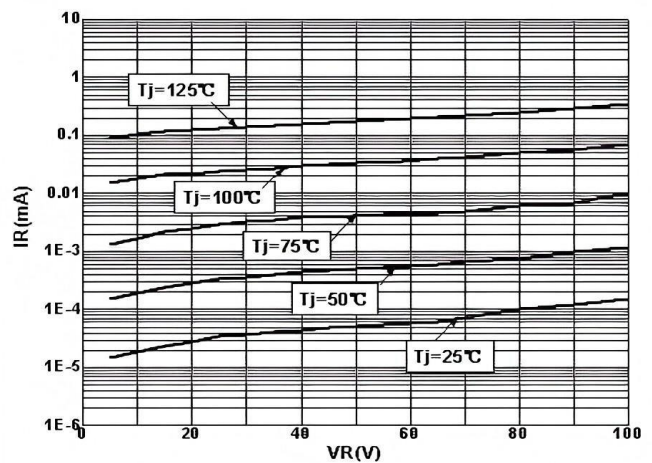
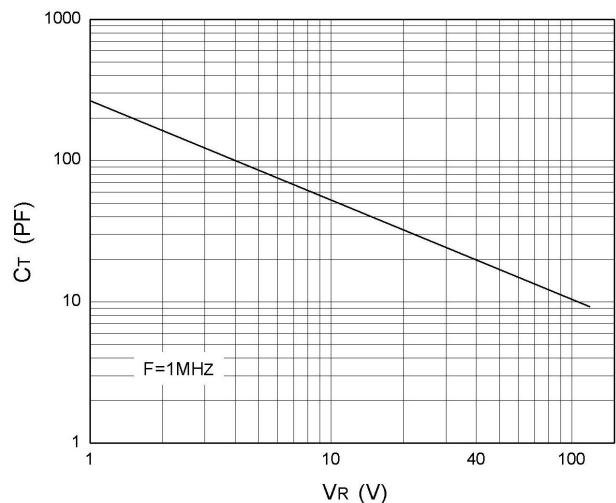
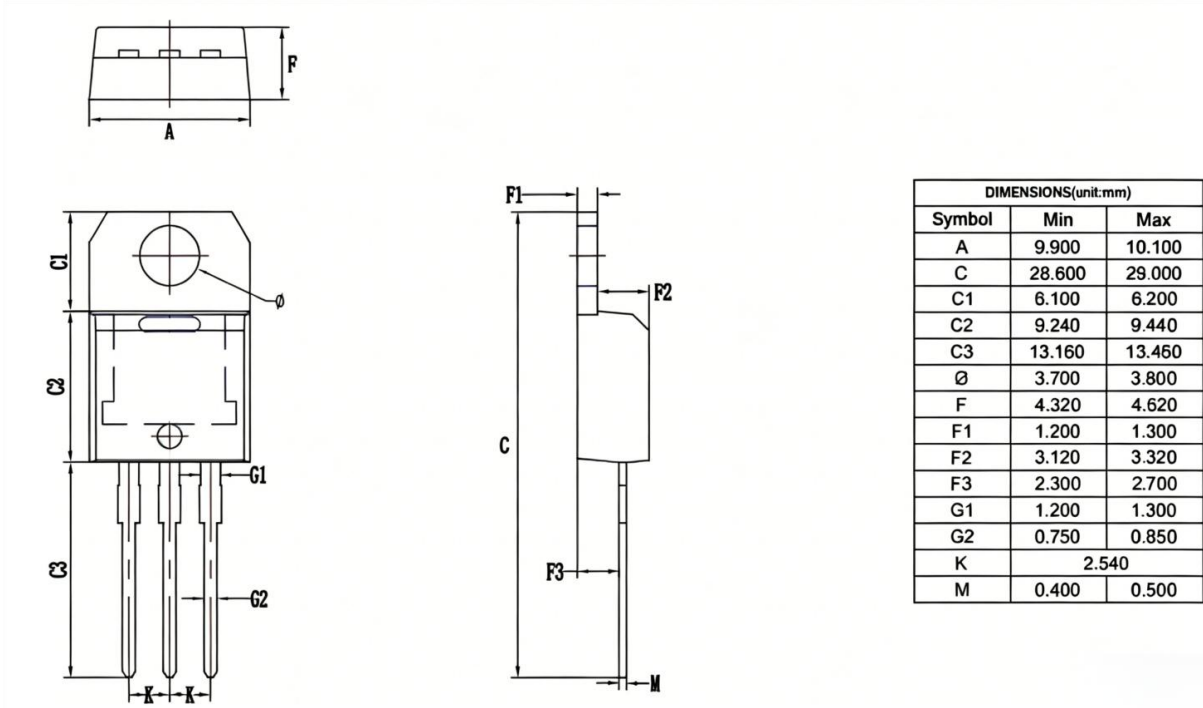


Fig 4. C_T vs V_R

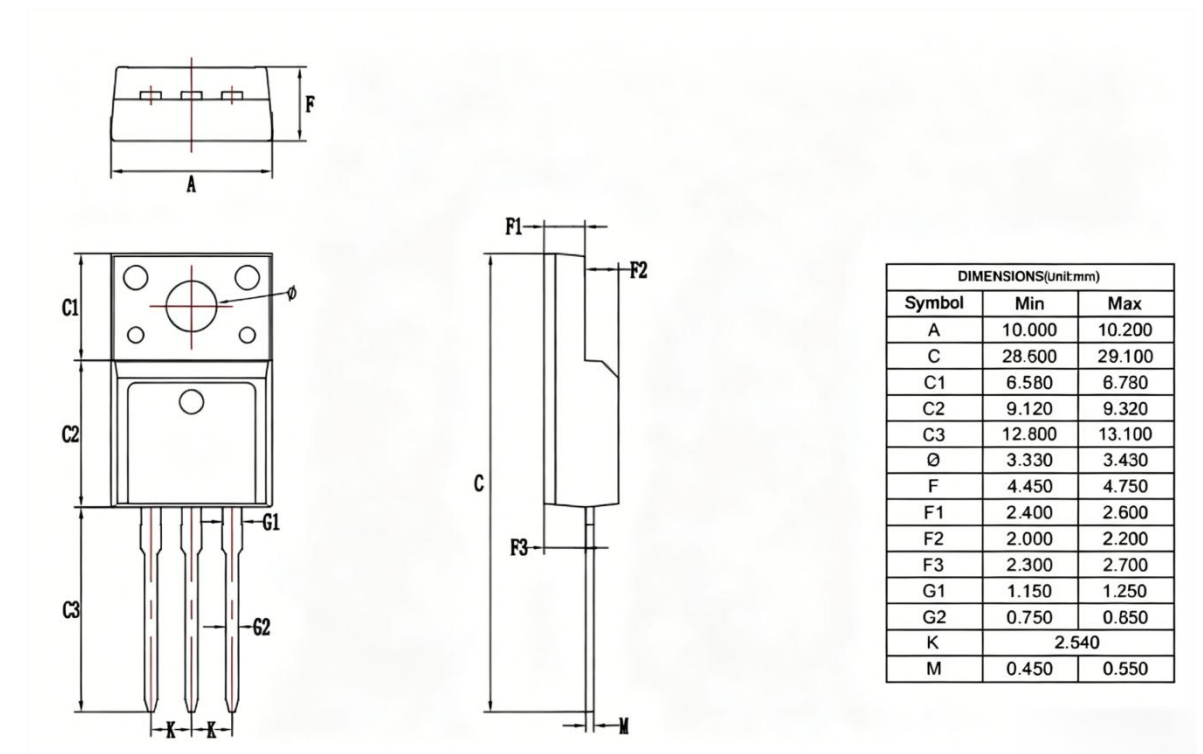


Package Outlines

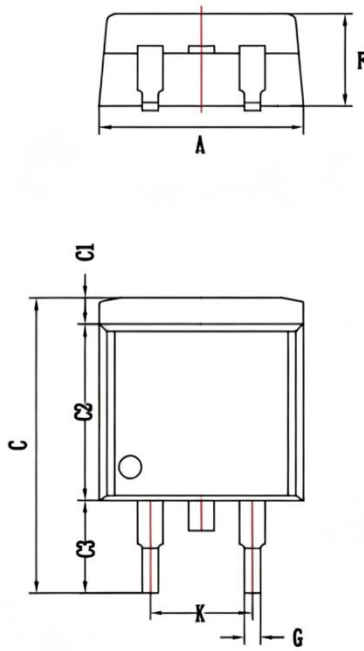
TO-220AB



TO-220F

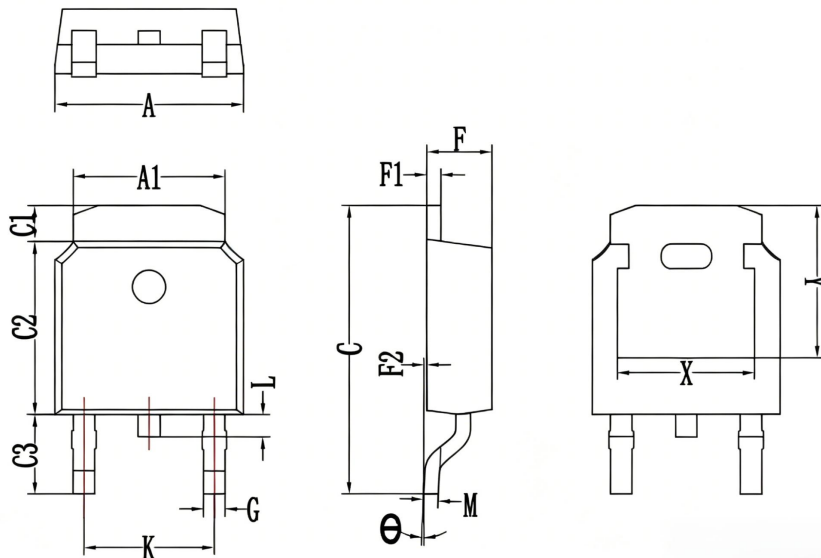


TO-263



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

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

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