Ultra Low VF=0.49V at IF=5A
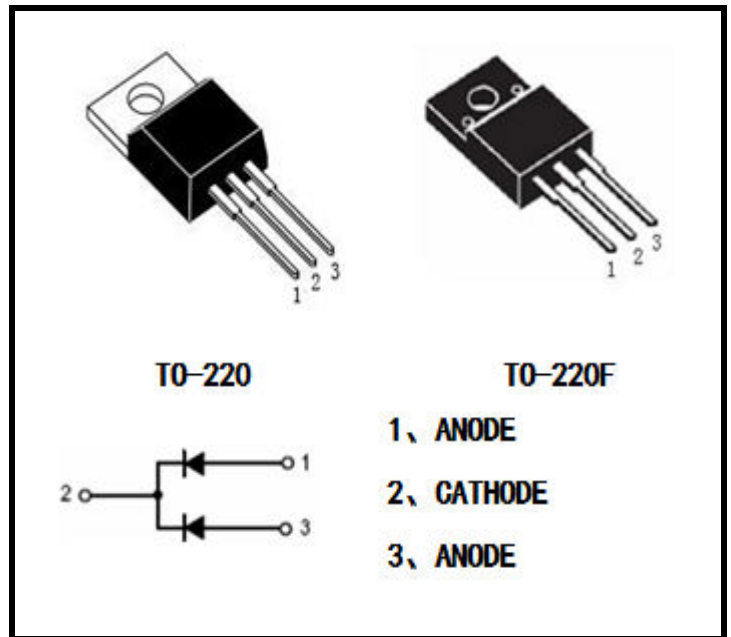
■FEATURES
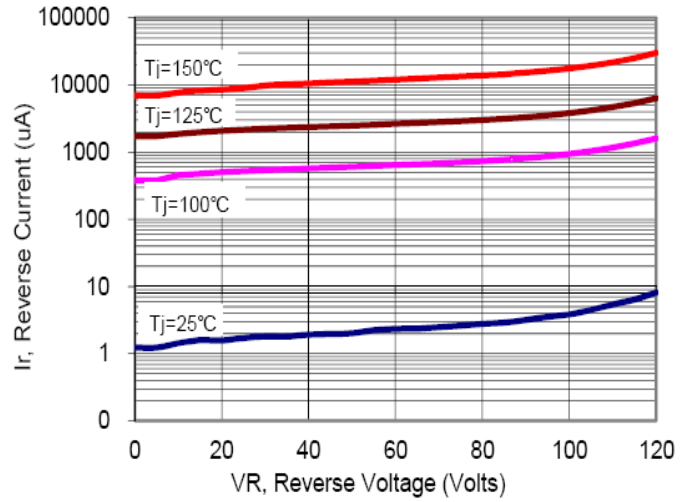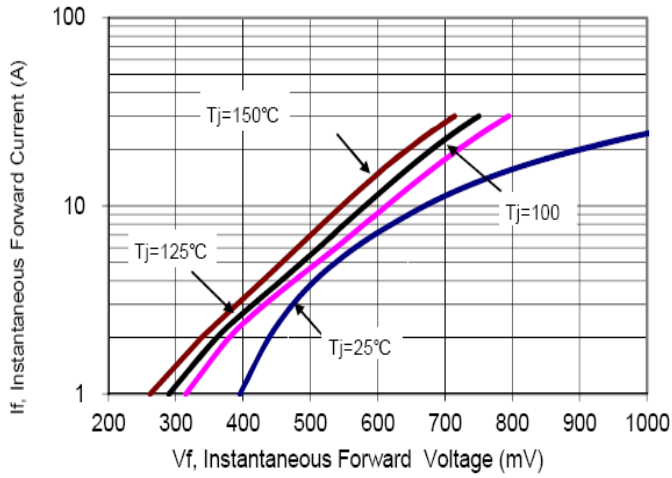
* Schottky Barrier Chip

* Guard Ring Die Construction for

  Transient Protection

* Low Power Loss, High Effciency

* High Surge Capability

* High Current Capability and Low

  Forward Voltage Drop

* For Use in Low Voltage, High Frequency

  Inverters, Free Wheeling, and Polarity

  Protection Applications

■PACKAGE

TO-220   TO-220F

1、ANODE

2、CATHODE

3、ANODE

■ELECTRICAL CHARACTERISTICS (Tamb=25℃)

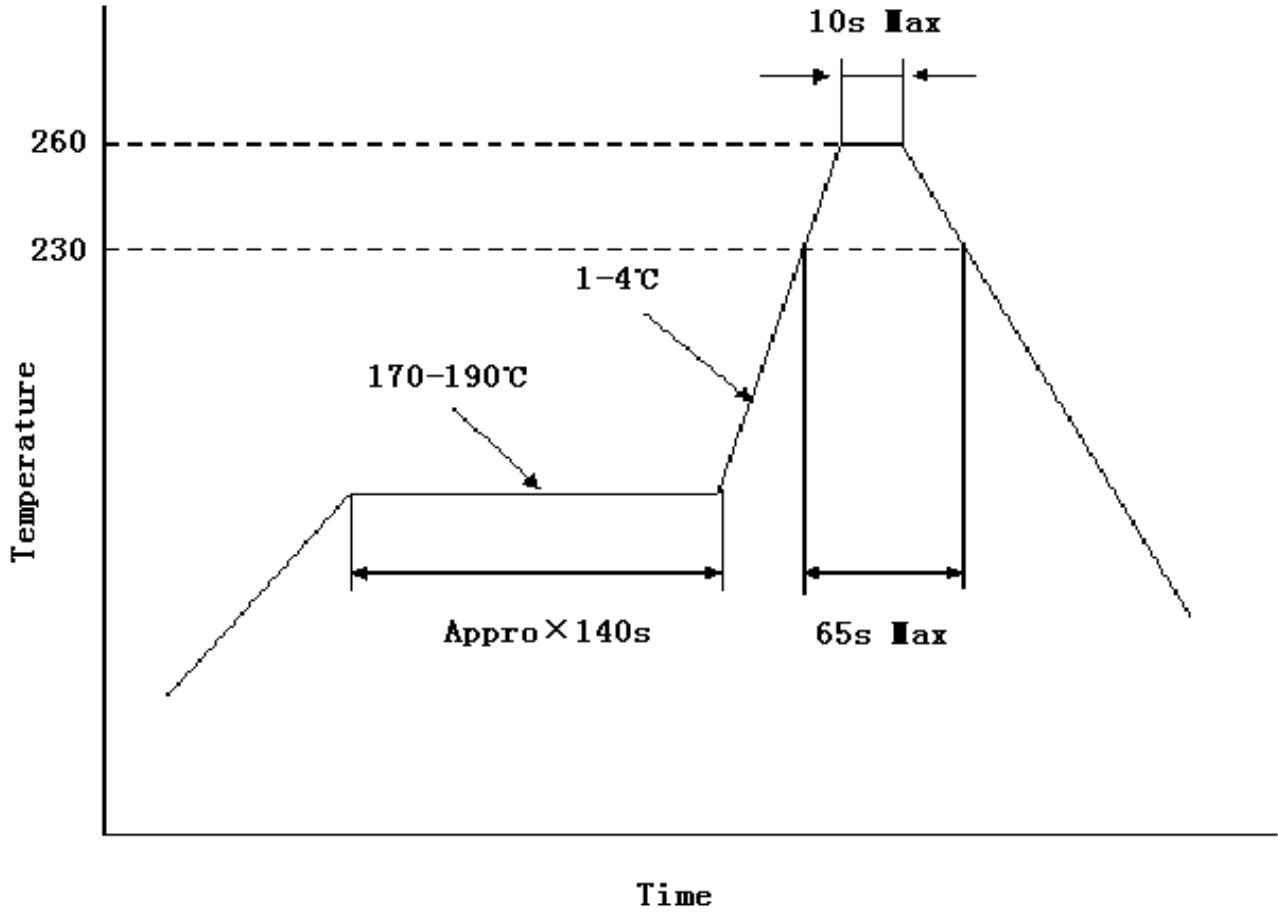| Characteristic	Symbol	Value		Unit
Peak Repetitive Reverse Voltage	V_{RRM}	120		V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
Average Rectifide Output Current	$I_{F(per\ leg)}$	10		A
	$I_{F(Total)}$	20		
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60H$_Z$)	I_{FSM}	275		A
Instaneous Forward Voltage @IF=5A, TC=25℃ @IF=10A, TC=25℃ @IF=5A, TC=125℃ @IF=10A, TC=125℃	V_F	TYP. 0.54 0.68 0.49 0.59		V
Peak Reverse Current @Tc=25 ℃ at Rated DC Blocking Voltage @Tc=125℃	I_R	0.1 6		mA
Operating and Storage Temperature Range	T_J, T_{STG}	−65 to +150		℃
Maximum Thermal Resistance	θ_{JC}	TO-220	2	℃/W
		TO-220F	4	
	θ_{JA}	TO-220	60	
		TO-220F	60	

■ Characteristics Curves

Typical Forward Voltage Per Diode

Typical Reverse Current Per Diode

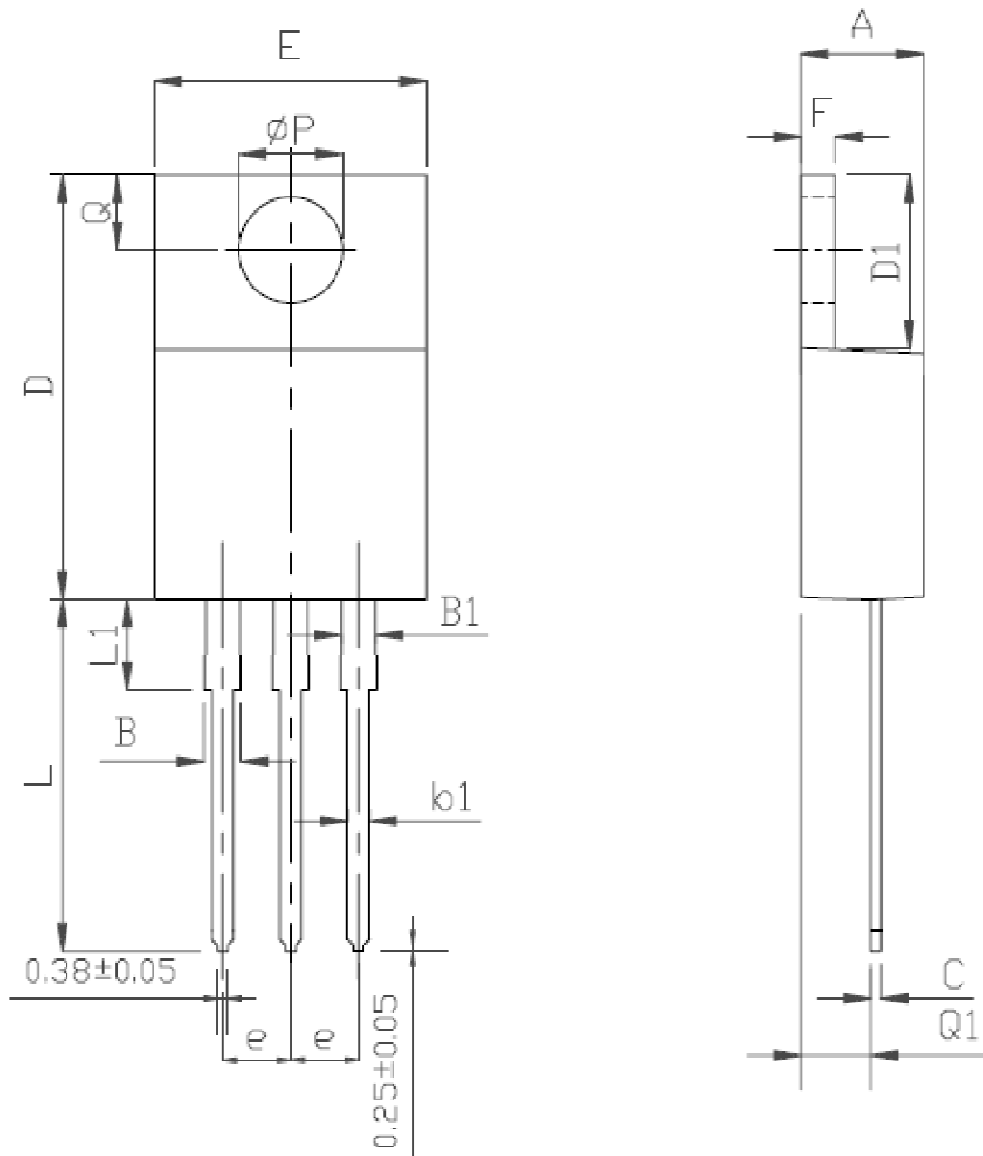Average Forward Forward Current vs.

Case Temperature Per Diode

■ Reflow Soldering Temperature Profile

TO-220 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4		4.8	e	2.44	2.54	2.64
B	1.2		1.4	F	1.1		1.4
B1	1		1.4	L	12.5		14.5
b1	0.75		0.95	L1	3	3.5	4
c	0.4		0.55	ΦP	3.7	3.8	3.9
D	15		16.5	Q	2.5		3
D1	5.9		6.9	Q1	2		2.9
E	9.9		10.7				

0.38±0.05

0.25±0.05

TO-220F MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.5		4.9	E1	6.5	7	7.5
A1	2.3		2.9	e	2.44	2.54	2.64
b	0.65		0.9	L	12.5		14.3
b1	1.1		1.7	L1	9.45		10.05
b2	1.2		1.4	L2	15		16
c	0.35		0.65	L3	3.2		4.4
D	14.5		16.5	ΦP	3		3.3
D1	6.1		6.9	Q	2.5		2.9
E	9.6		10.3				