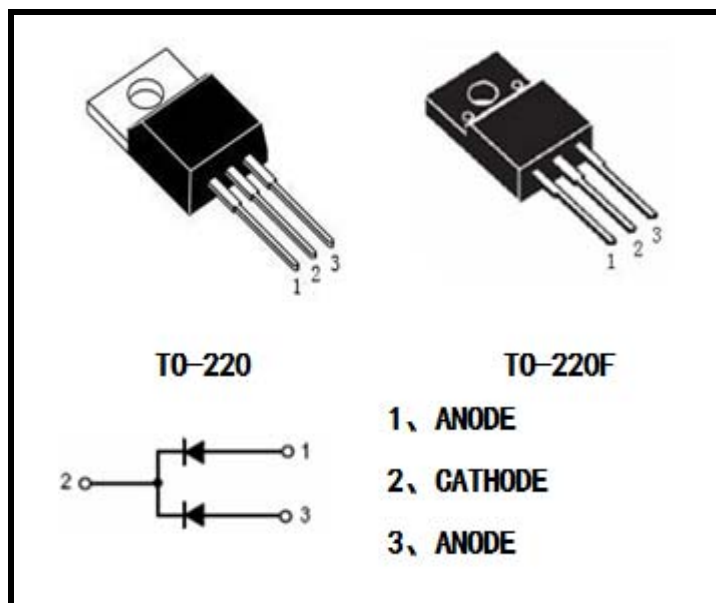


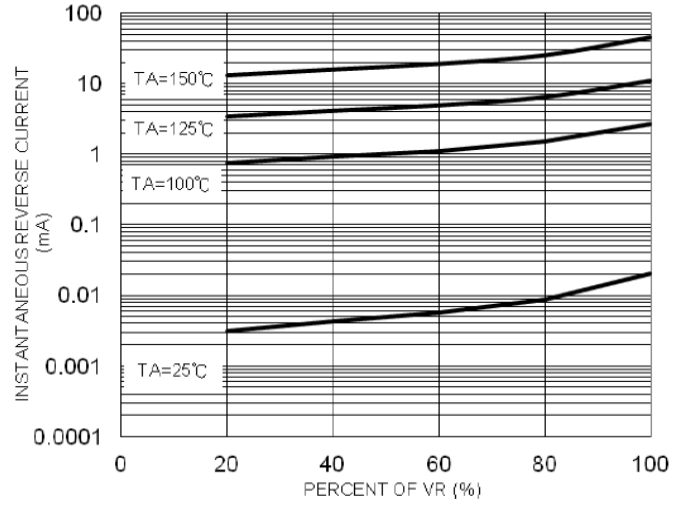
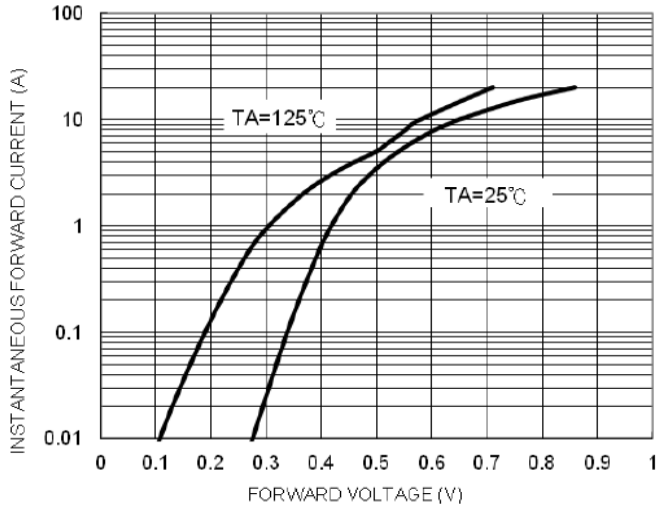
**Ultra Low  $V_F=0.50V$  at  $I_F=5A$** 
**FEATURES**

- \* Schottky Barrier Chip
- \* Guard Ring Die Construction for Transient Protection
- \* Low Power Loss, High Efficiency
- \* 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**

**ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C)**

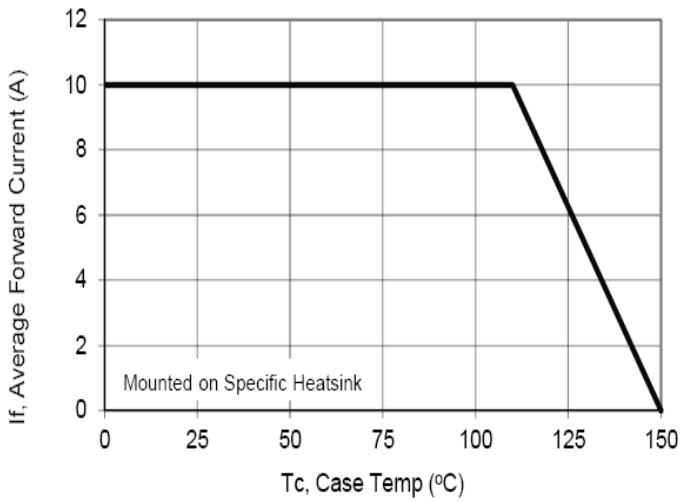
Characteristic	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V	
Working Peak Reverse Voltage	$V_{RWM}$			
DC Blocking Voltage	$V_R$			
Average Rectifide Output Current	$I_{F(per\ leg)}$	10	A	
	$I_{F(Total)}$	20		
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	275	A	
Instaneous Forward Voltage @ $I_F=5A, T_C=25^\circ C$ @ $I_F=10A, T_C=25^\circ C$ @ $I_F=5A, T_C=125^\circ C$ @ $I_F=10A, T_C=125^\circ C$	$V_F$	TYP.	V	
		0.54		
		0.65		
		0.5		
0.58				
Peak Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=125^\circ C$	$I_R$	0.1 20	mA	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150	°C	
Maximum Thermal Resistance	$\theta_{JC}$	TO-220	2	°C/W
		TO-220F	4	
	$\theta_{JA}$	TO-220	60	
		TO-220F	60	

**Characteristics Curves**



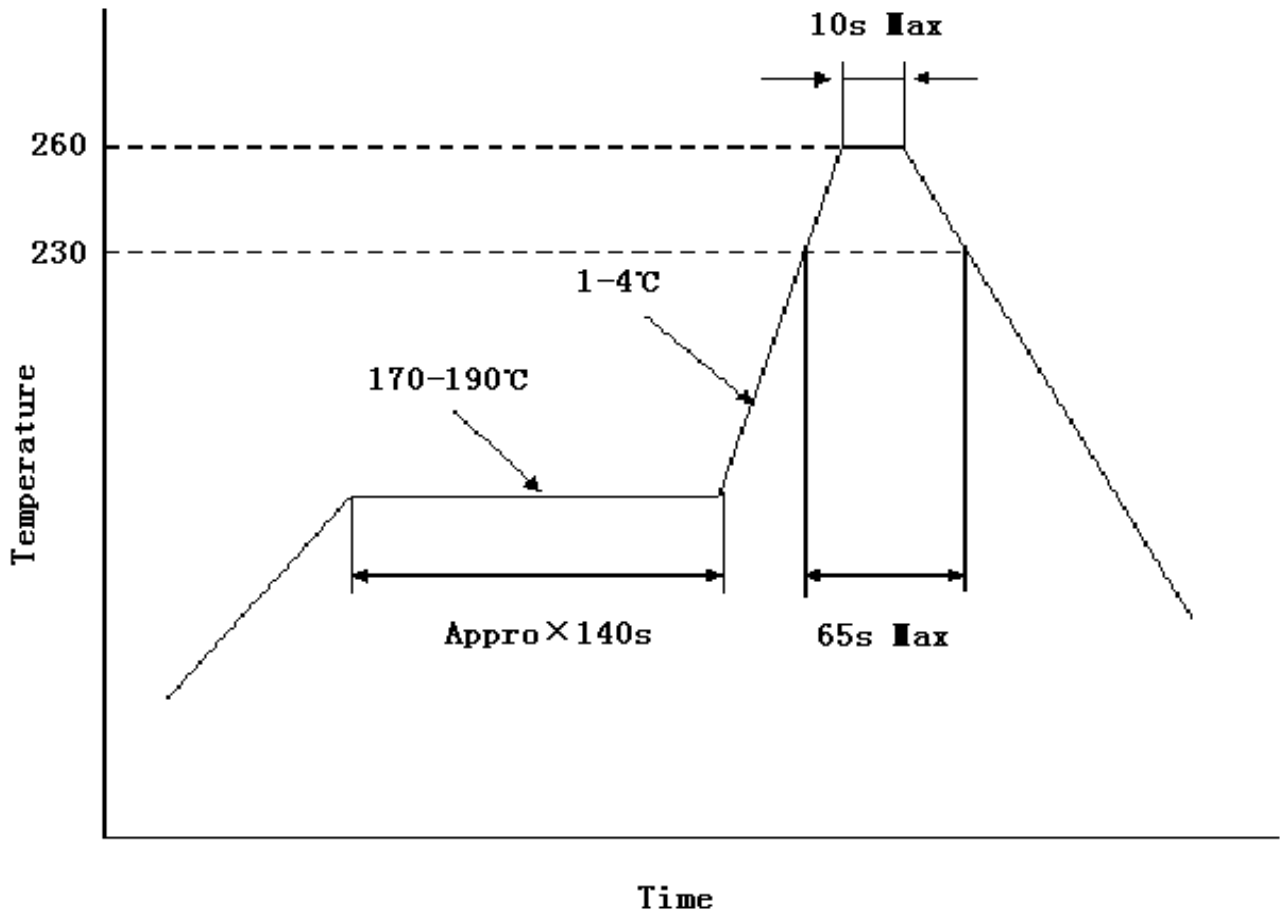
**Typical Forward Voltage Per Diode**

**Typical Reverse Current Per Diode**



**Average Forward Current vs. Case Temperature Per Diode**

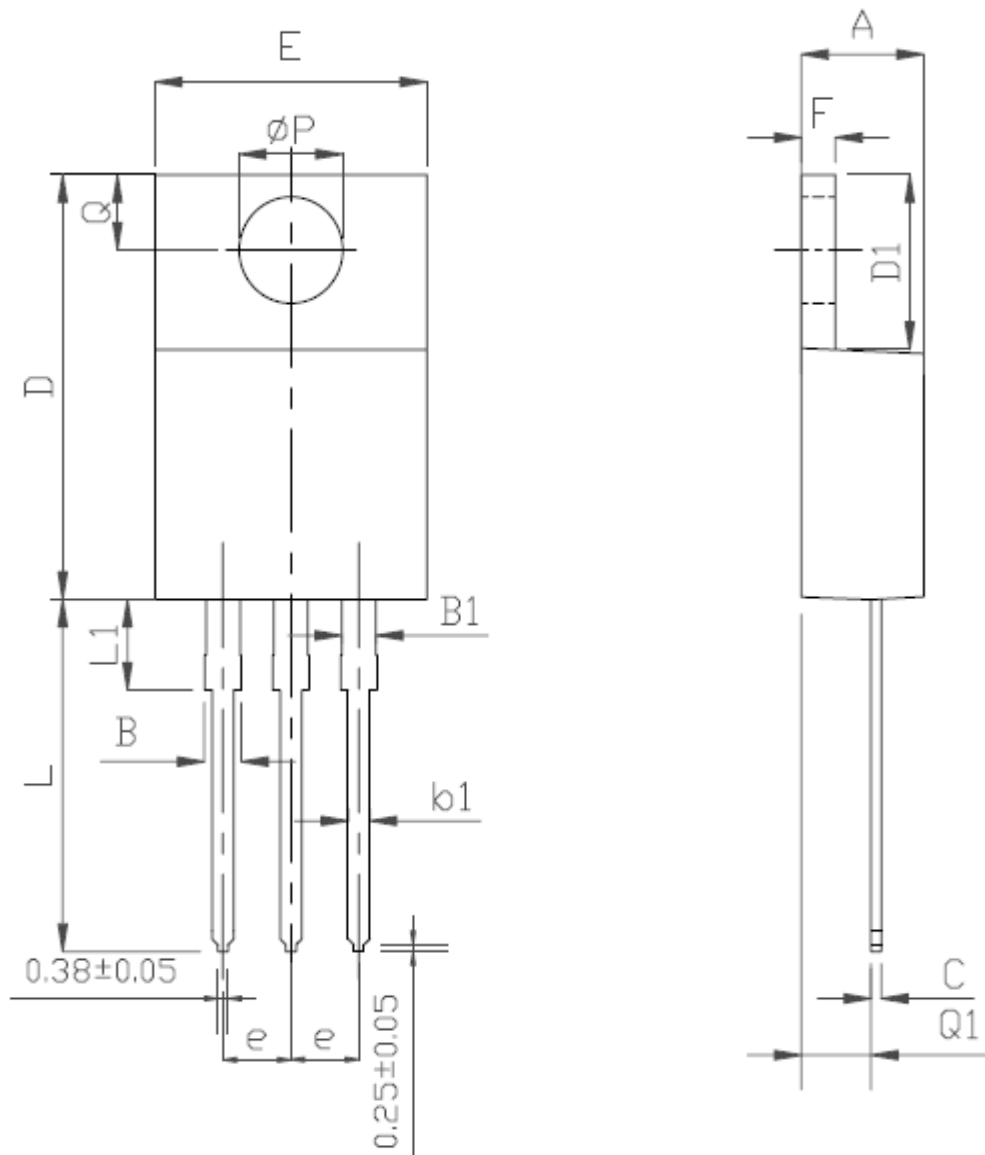
■ Reflow Soldering Temperature Profile



**T0-220 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				



## 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	$\Phi P$	3		3.3
D1	6.1		6.9	Q	2.5		2.9
E	9.6		10.3				

