

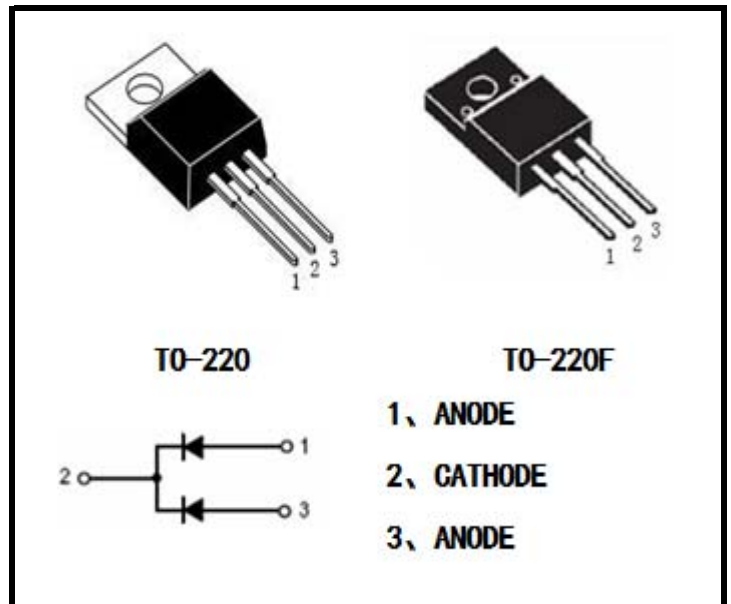


Ultra Low  $V_F=0.43V$  at  $I_F=5A$

■ 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

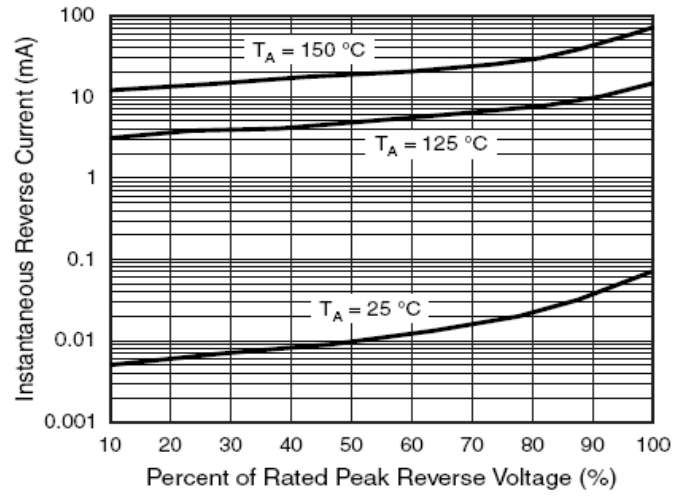
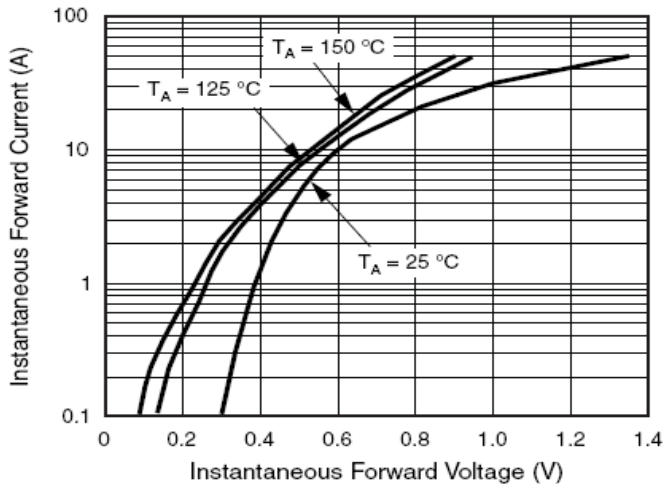


■ ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ )

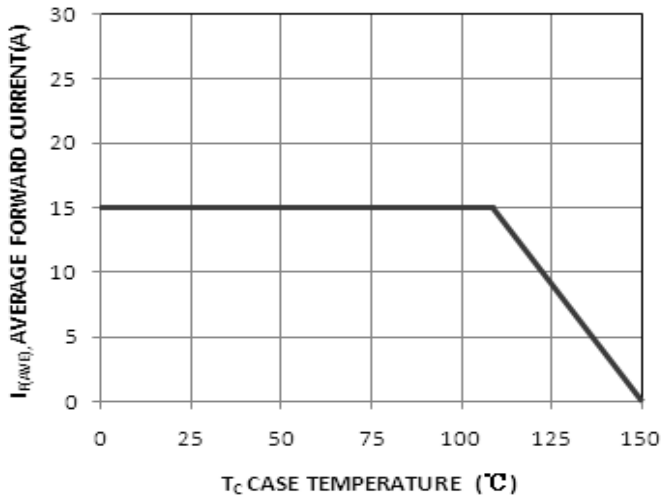
Characteristic	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V	
Working Peak Reverse Voltage	$V_{RWM}$			
DC Blocking Voltage	$V_R$			
Average Rectifide Output Current	$I_{F(per\ leg)}$	15	A	
	$I_{F(Total)}$	30		
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	350	A	
Maximum Instaneous Forward Voltage @ $I_F=5A, T_C=25^{\circ}C$ @ $I_F=15A, T_C=25^{\circ}C$ @ $I_F=5A, T_C=125^{\circ}C$ @ $I_F=15A, T_C=125^{\circ}C$	$V_F$	TYP.	V	
		0.49		
		0.67		
		0.43		
0.62				
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	$^{\circ}C$	
Maximum Thermal Resistance	$\theta_{JC}$	TO-220	2	$^{\circ}C/W$
		TO-220F	4	
	$\theta_{JA}$	TO-220	60	
		TO-220F	60	



### ■ Characteristics Curves



Typical Forward Voltage Per Diode

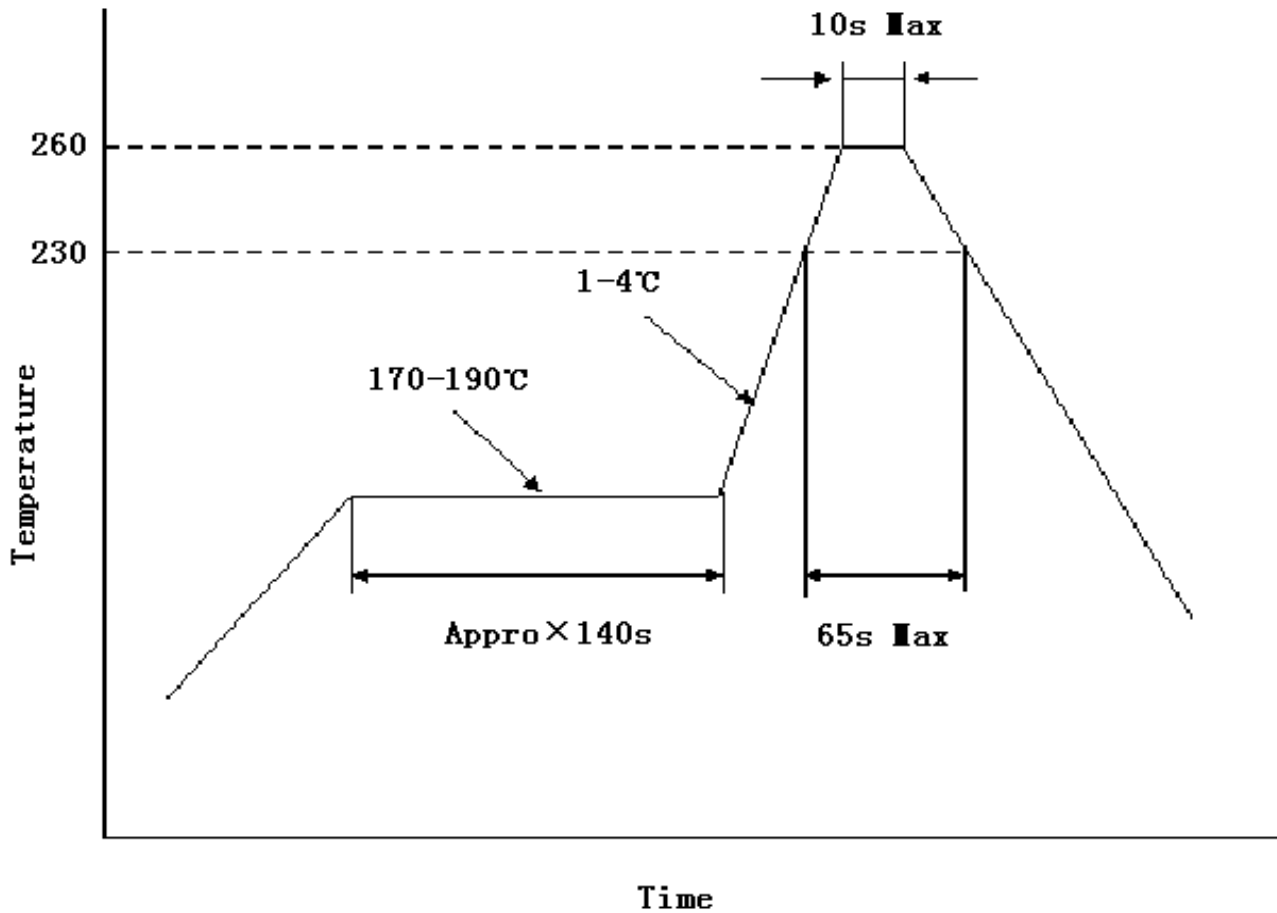


Typical Reverse Current Per Diode

Average Forward Current vs. Case Temperature Per Diode



### ■ Reflow Soldering Temperature Profile

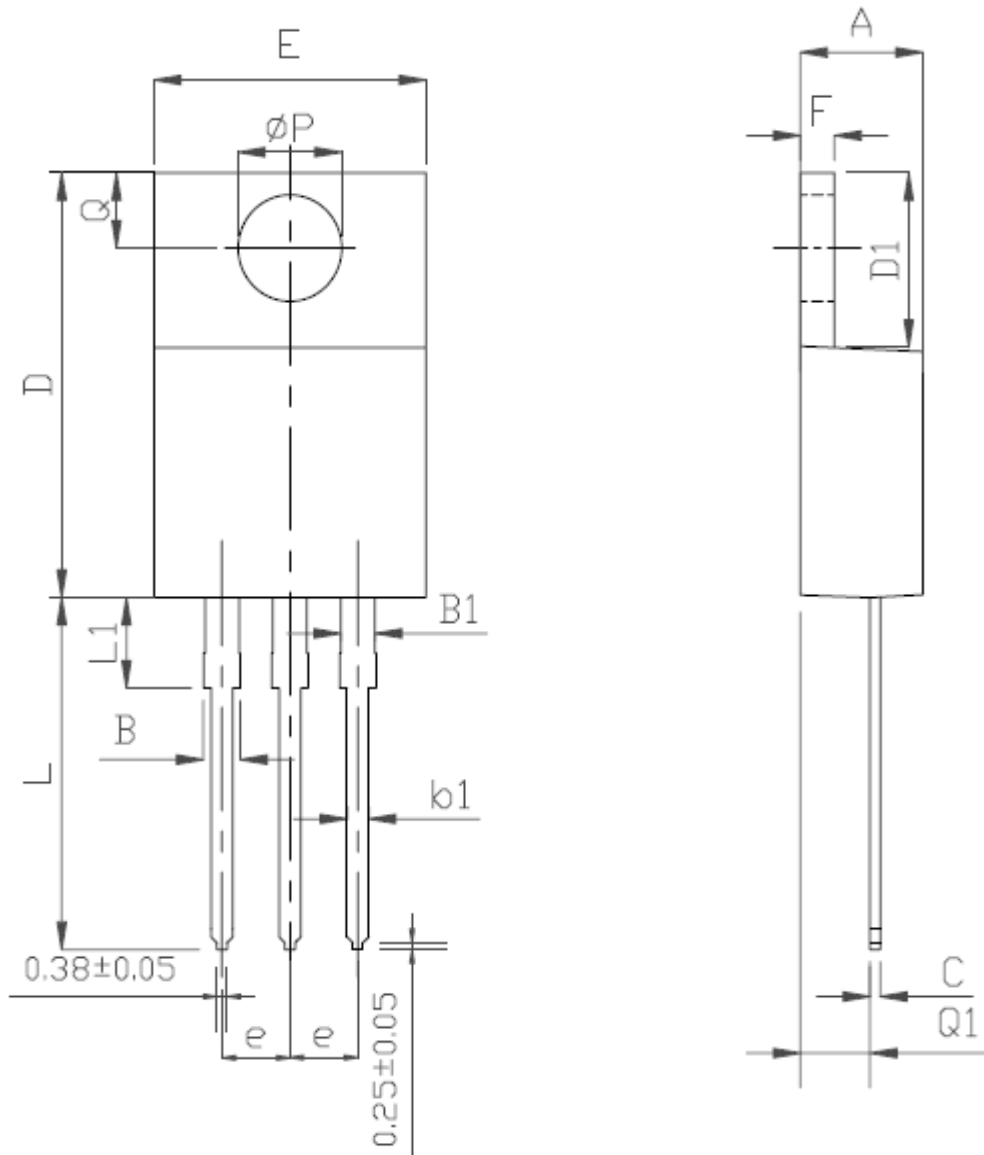




TO-220 MECHANICAL DATA

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				





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				

