

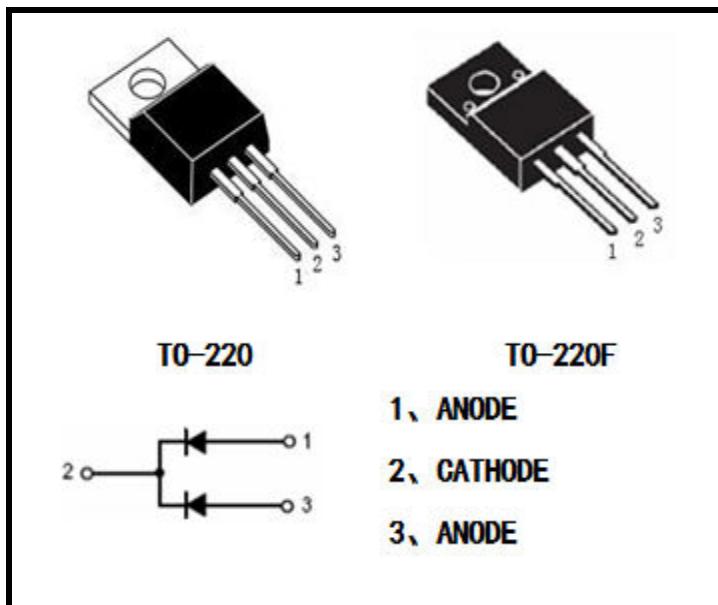


Ultra Low VF=0.60V at IF=5A

■ 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

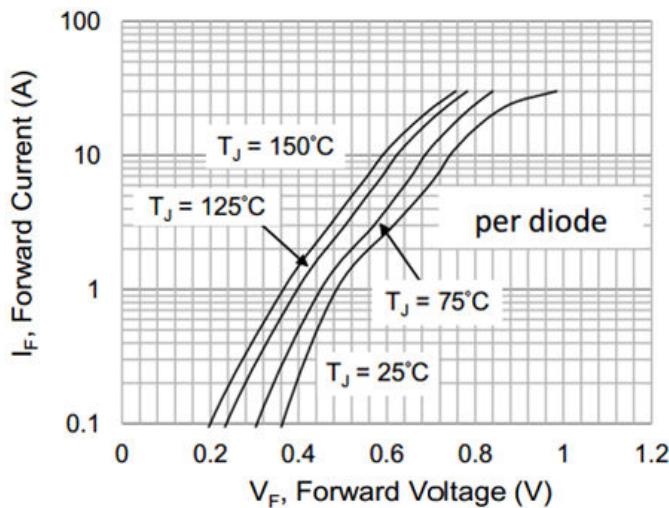
■ PACKAGE



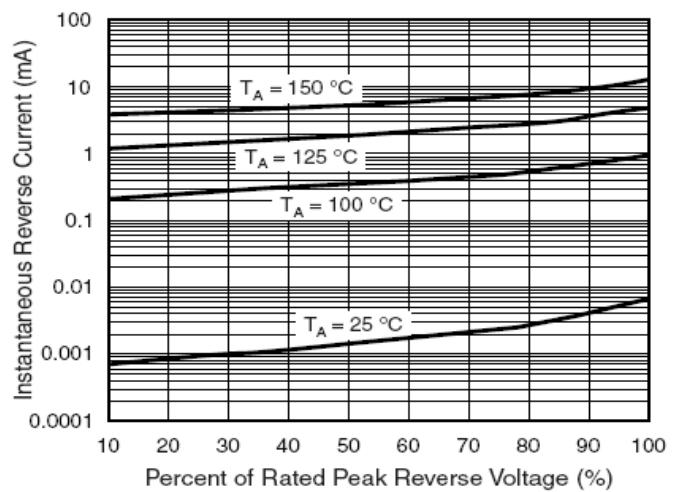
■ ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	150	V
DC Blocking Voltage	V _R		
Average Rectified 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
Instantaneous Forward Voltage @IF=5A, TC=25°C	V _F	TYP. 0.72	V
@IF=10A, TC=25°C		0.78	
@IF=5A, TC=125°C		0.6	
@IF=10A, TC=125°C		0.65	
Peak Reverse Current @Tc=25 °C at Rated DC Blocking Voltage @Tc=125°C	I _R	0.1 20	mA
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C
Maximum Thermal Resistance	θ _{JC}	T0-220	2
		T0-220F	4
	θ _{JA}	T0-220	60
		T0-220F	60

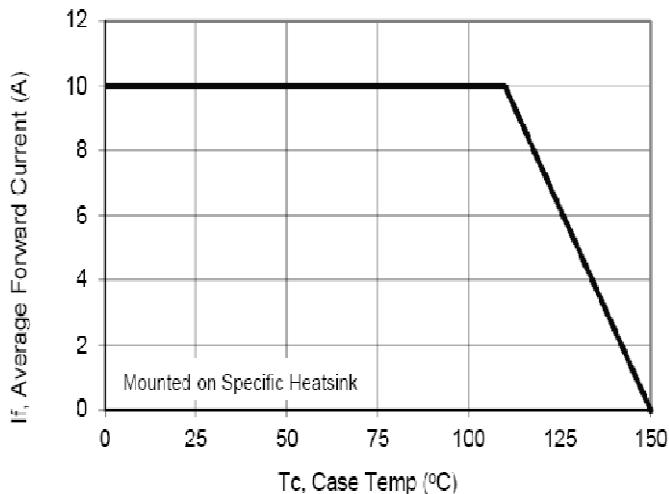
Characteristics Curves



Typical Forward Voltage Per Diode



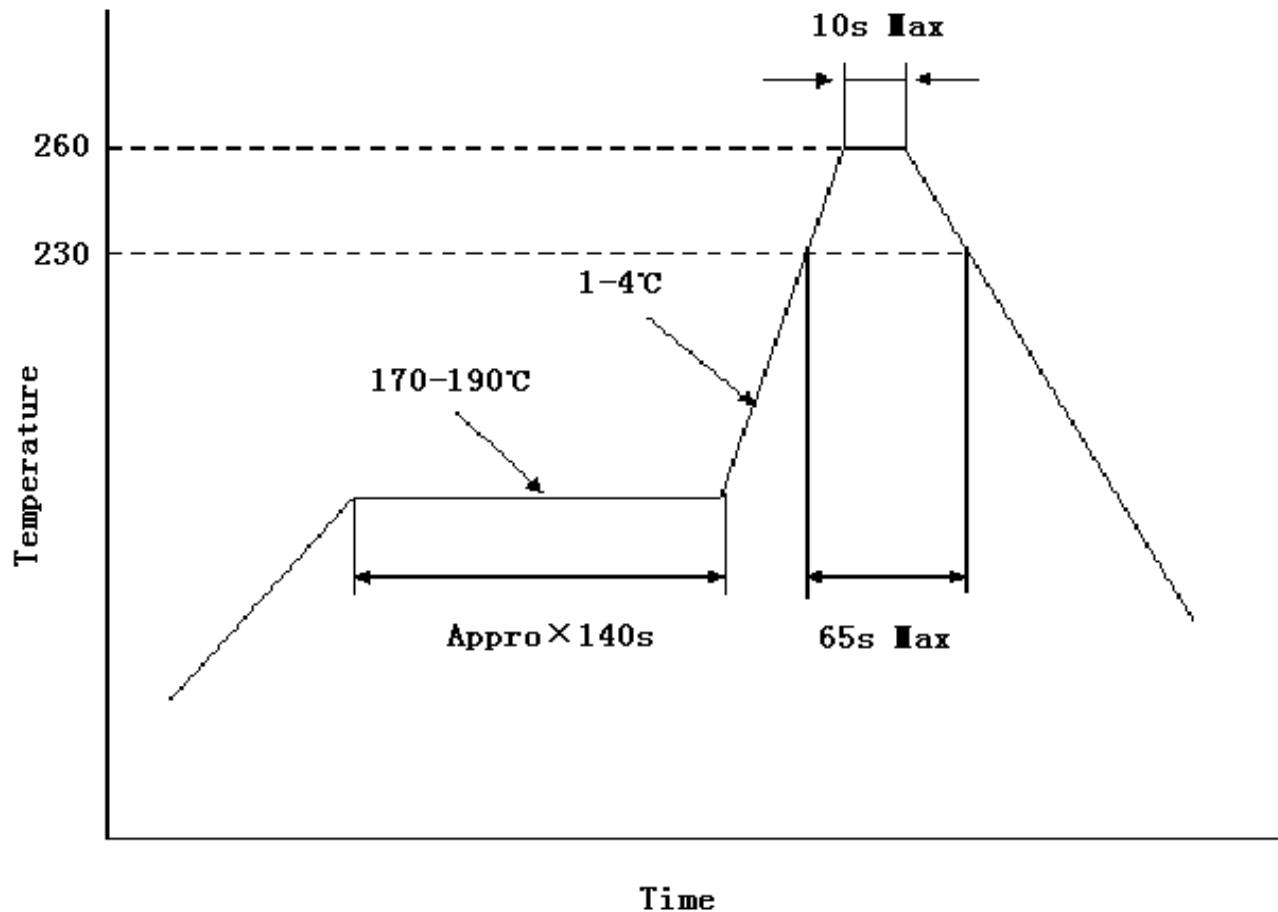
Typical Reverse Current Per Diode



Average Forward Forward Current vs.
Case Temperature Per Diode



■ Reflow Soldering Temperature Profile

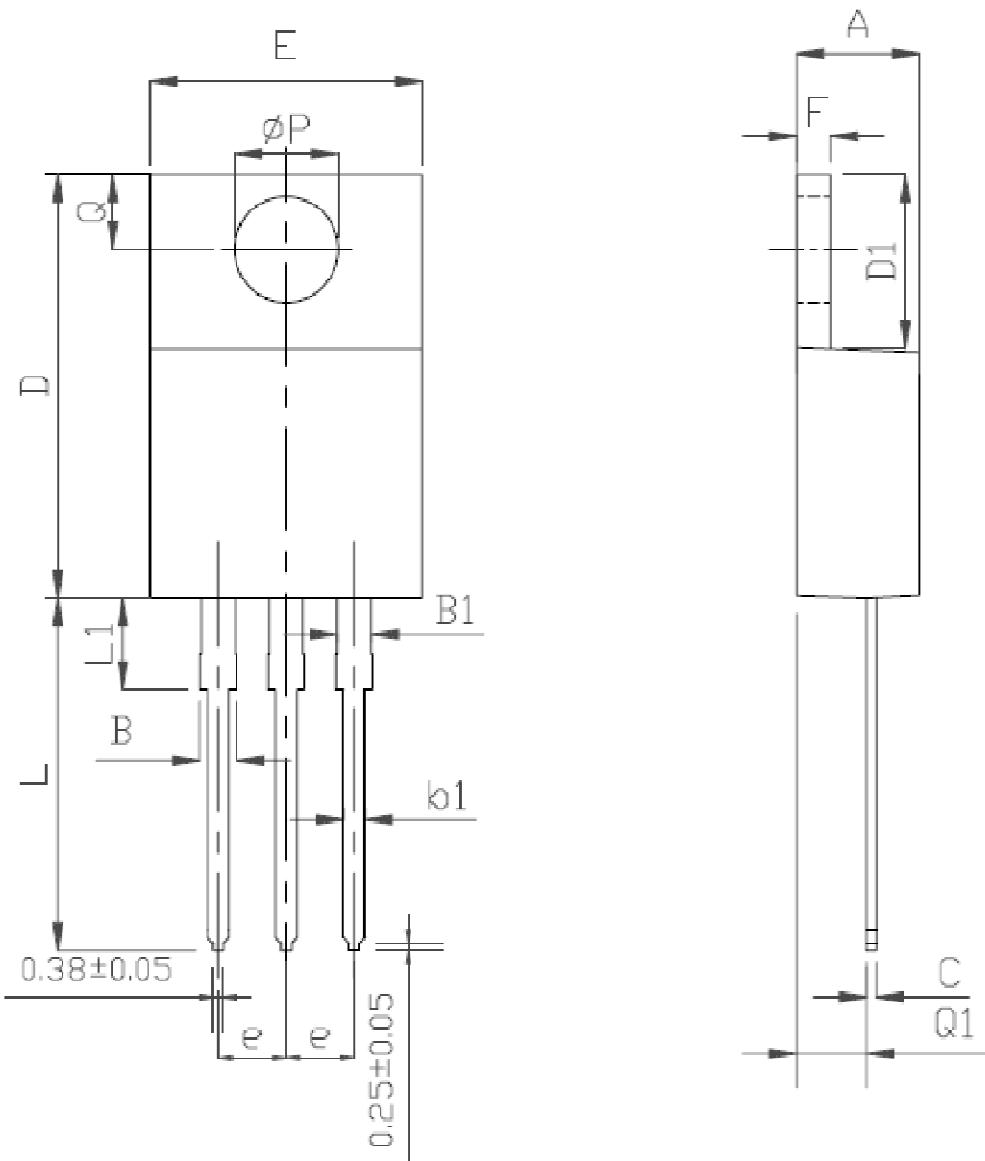




TO-220 MECHANICAL DATA

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				



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				

