



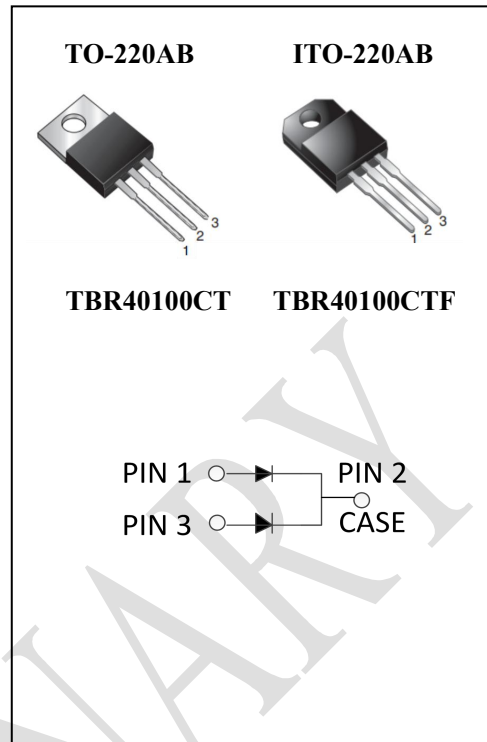
FEATURES

- Trench Schottky technology
- Lower forward voltage
- Lower power loss, high efficiency
- Softest, fast switching capability
- High surge capability
- Lead Free Finish, ROHS Compliant

TYPICAL APPLICATIONS

For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, DC/DC converters or polarity protection application

PRIMARY CHARACTERISTICS	
IF (AV)	2×20A
VRRM	100V
IFSM	120A
VF	0.71V
TJ max.	150°C



Maximum ratings and electrical characteristics (TA = 25 °C unless otherwise noted)

Parameter	Description	Test Condition	Min.	Typ.	Max.	Unit	
VRRM	Maximum repetitive peak reverse voltage	Ir = 500µA	108	116	—	V	
IF (AV)	Maximum average forward rectified current		—	—	20	A	
IFSM	Maximum Peak forward surge current	1/2 60hz	—	—	120	A	
VF	Static Forward Voltage	IF = 5A	TA = 25°C	—	0.48	0.58	V
		IF = 20A		—	0.71	0.80	V
		IF = 5A	TA = 125°C	—	0.41	0.50	V
		IF = 20A		—	0.66	0.75	V
IR	Maximum reverse current per diode at working peak reverse voltage	VR = 100V	TA = 25°C	—	9	30	µA
			TA = 125°C	—	5	30	mA
RθJC	Typical Thermal Resistance	TO-220AB	2		°C/W		
		ITO-220AB	4				
TJ, TSTG	Operating and Storage Temperature Range	-55°C to 150°C Max					



RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)

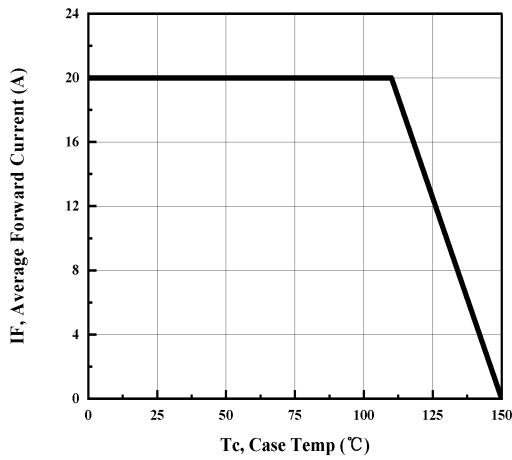


Fig. 1: Forward Current Derating Curve

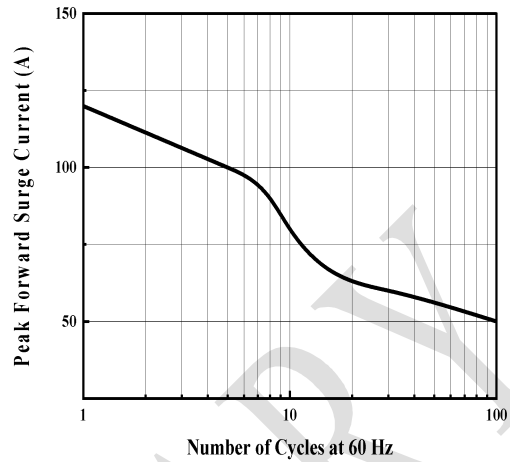


Fig. 2: Maximum Repetitive Surge Current

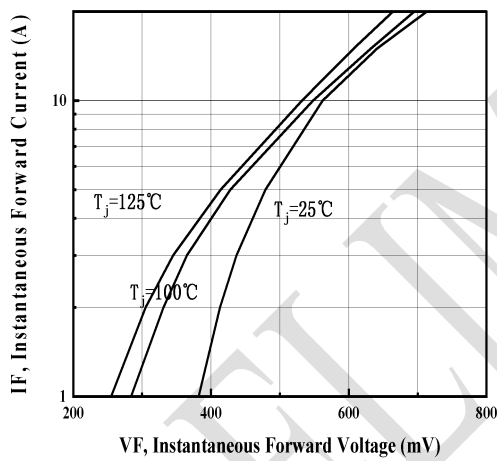


Fig. 3: Typical Forward Voltage

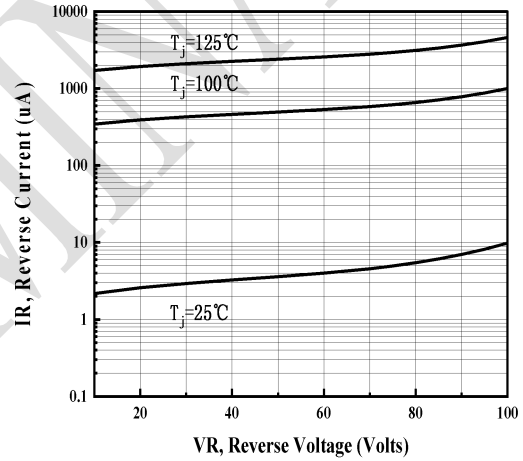


Fig. 4: Typical Reverse Current

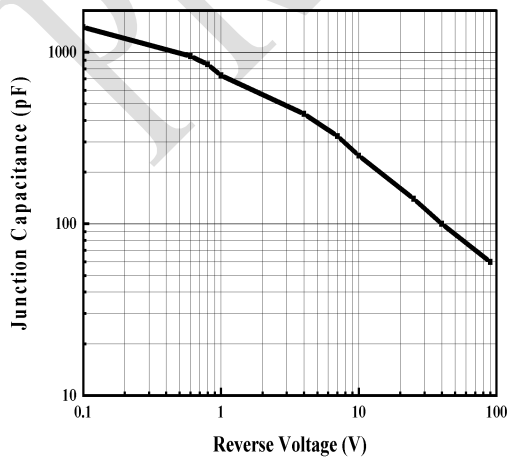
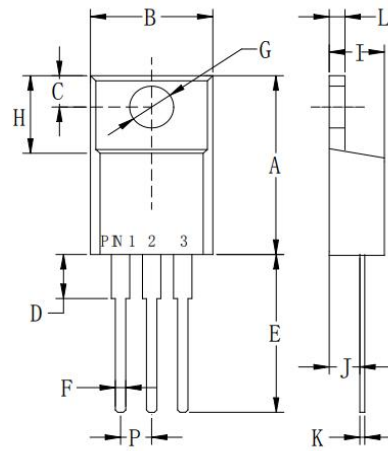
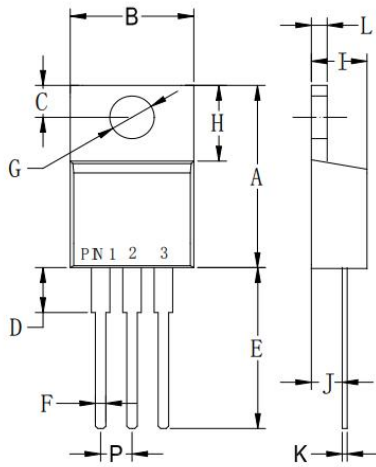


Fig. 5: Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS in millimeters



TO-220AB(TBR40100CT)

ITO-220AB(TBR40100CTF)

	MIN	MAX
A	14.60	15.75
B	9.90	10.05
C	2.75	2.85
D	3.56	4.06
E	13.0	14.3
F	0.68	0.94
G	3.62	3.91
H	5.80	6.90
I	4.40	4.60
J	2.30	2.50
K	0.35	0.65
L	1.13	1.40
P	2.40	2.68

	MIN	MAX
A	14.50	15.97
B	9.96	10.36
C	2.60	3.40
D	3.30	4.20
E	12.73	13.13
F	0.68	0.94
G	2.90	3.50
H	6.43	6.90
I	4.30	4.90
J	2.63	2.80
K	0.45	0.65
L	2.46	2.86
P	2.30	2.83



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PRELIMINARY