



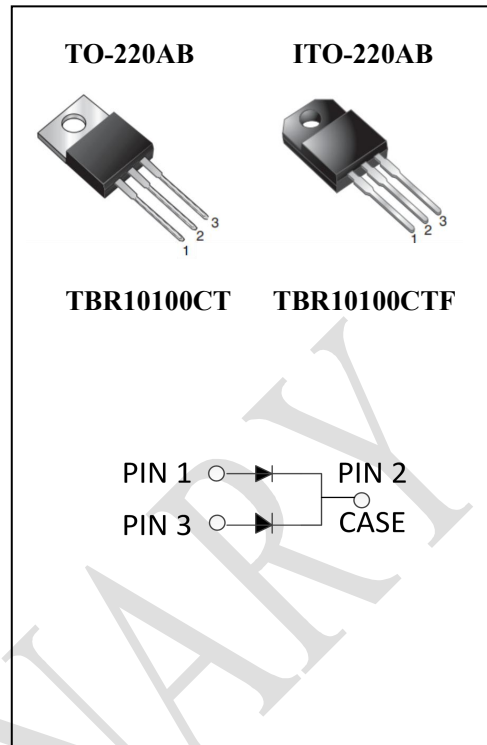
FEATURES

- 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	
$I_{F(AV)}$	2×5A
V_{RRM}	100V
I_{FSM}	140A
VF	0.58V
$T_{Jmax.}$	150°C



Maximum ratings and electrical characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Description	Test Condition	Min.	Typ.	Max.	Unit
V_{RRM}	Maximum repetitive peak reverse voltage	$I_R = 500\mu\text{A}$	108	117	—	V
$I_{F(AV)}$	Maximum average forward rectified current		—	—	10	A
I_{FSM}	Maximum Peak forward surge current	1/2 60hz	—	—	150	A
V_F	Static Forward Voltage	$I_F = 1\text{A}$ $T_A = 25^\circ\text{C}$	—	0.41	0.45	V
		$I_F = 5\text{A}$ $T_A = 25^\circ\text{C}$	—	0.58	0.64	V
		$I_F = 1\text{A}$ $T_A = 125^\circ\text{C}$	—	0.31	0.41	V
		$I_F = 5\text{A}$ $T_A = 125^\circ\text{C}$	—	0.54	0.64	V
I_R	Maximum reverse current per diode at working peak reverse voltage	$V_R = 100\text{V}$ $T_A = 25^\circ\text{C}$	—	10	30	μA
		$V_R = 100\text{V}$ $T_A = 125^\circ\text{C}$	—	5	30	mA
$R_{\theta JC}$	Typical Thermal Resistance	TO-220AB	2			$^\circ\text{C/W}$
		ITO-220AB	4			
T_J, T_{STG}	Operating and Storage Temperature Range	-55°C to 150°C Max				



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

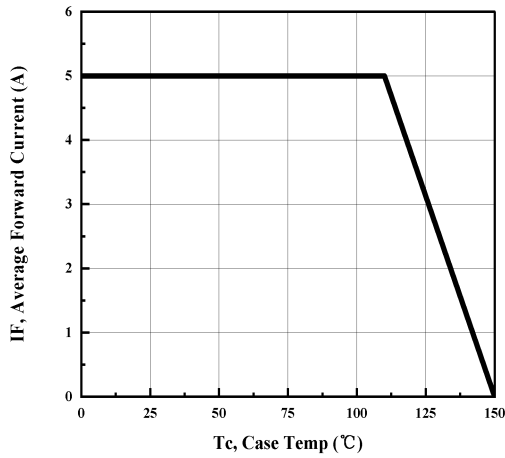


Fig. 1: Forward Current Derating Curve

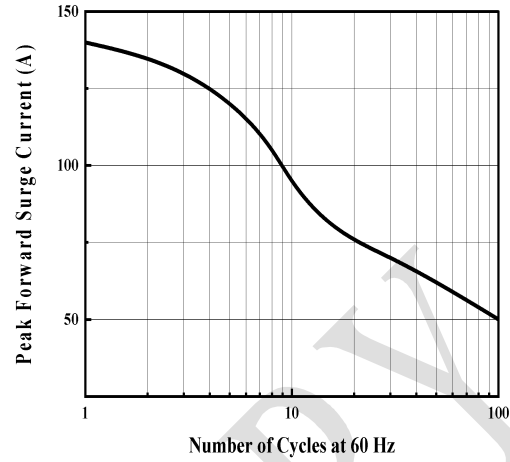


Fig. 2: Maximum Repetitive Surge Current

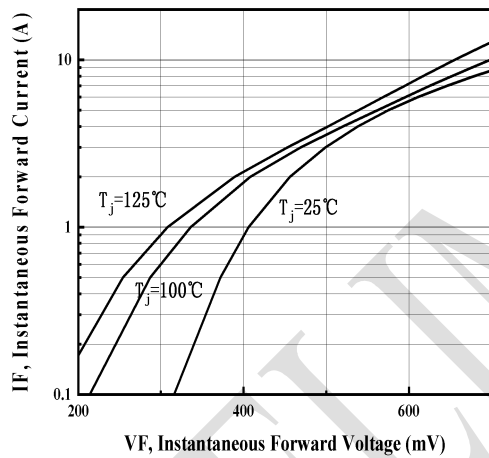


Fig. 3: Typical Forward Voltage

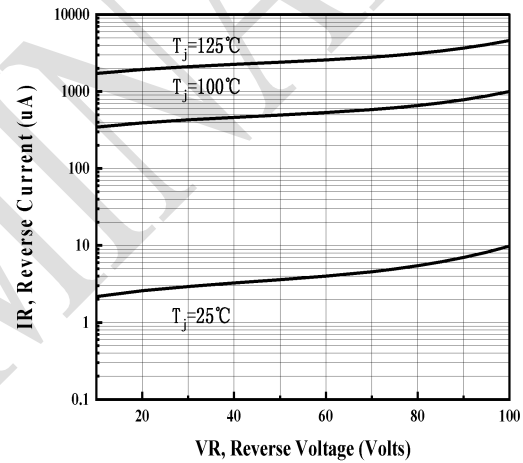


Fig. 4: Typical Reverse Current

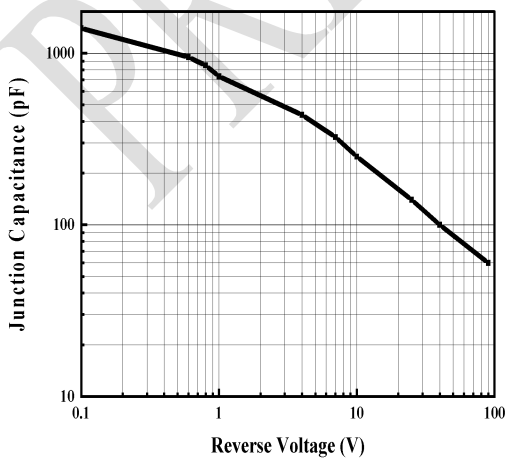
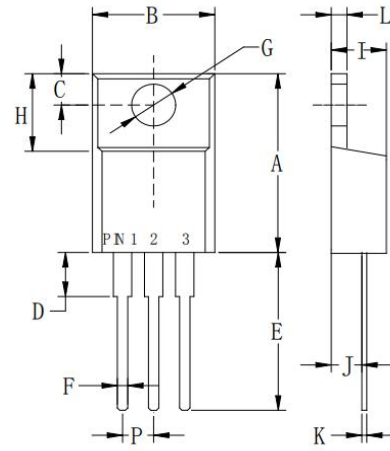
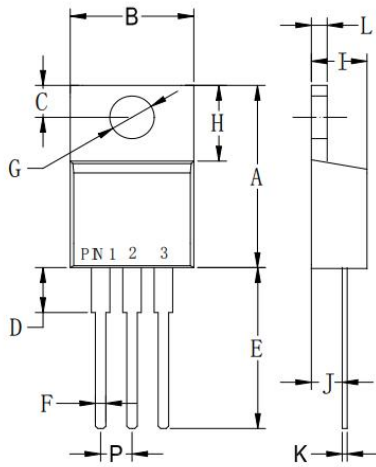


Fig. 5: Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS in millimeters



TO-220AB(TBR10100CT)

ITO-220AB(TBR10100CTF)

	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