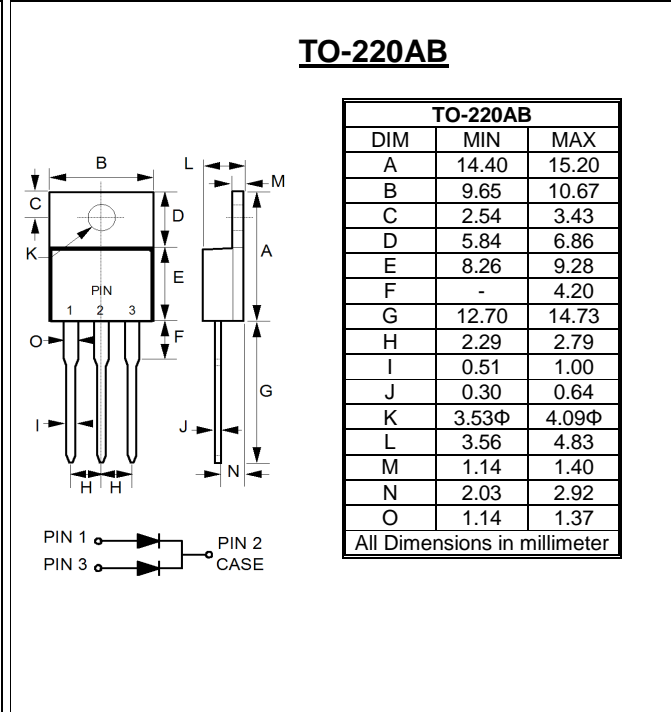


TRENCH SCHOTTKY RECTIFIERS

REVERSE VOLTAGE – 60 Volts
FORWARD CURRENT – 20 Amperes

- FEATURES**
- Trench Schottky technology
 - Low power loss, high efficiency
 - Low forward drop voltage
 - For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- MECHANICAL DATA**
- Case: TO-220AB molded plastic
 - Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
 - Terminals: Matte Tin
 - Lead Free Finish, RoHS Compliant
 - Polarity: As marked on the body
 - Weight: 0.072 ounces, 2.0275 grams(Approximate)
 - Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
 Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Average Rectified Output Current per device @ $T_C=120^\circ C$	I_F	20	A
Non-repetitive Peak Forward Surge Current single half sine-wave $t_p=8.3ms$	I_{FSM}	200	A
Operating junction and Storage temperature range	T_J, T_{STG}	-55 to +150	°C

STATIC ELECTRICAL CHARACTERISTICS

Parameter	Test condition	Symbol	Typ.	Max.	Unit
Maximum Forward Voltage Note(1)	$I_F=10A$ @ $T_J=25^\circ C$ @ $T_J=125^\circ C$	V_F	0.50 0.47	0.57 0.52	V
Maximum DC Reverse Current	$V_R=60V$ @ $T_J=25^\circ C$ @ $T_J=125^\circ C$	I_R	- -	0.25 30	mA
Junction Capacitance per element	$f=1MHz, V_R=4V$	C_j	760	-	pF

THERMAL CHARACTERISTICS

Parameter	SYMBOL	VALUE	UNIT
Typical thermal resistance Junction (Note 2&3)	$R_{\theta JC}$	2.0	°C/W
	$R_{\theta JL}$	3.0	
	$R_{\theta JA}$	15	

Note :
 (1) 300us Pulse Width, 2% Duty Cycle.
 (2) Thermal Resistance Junction to Case, Lead and Ambient.
 (3) Device mounted on 60 x 60 x 1.5 mm Copper plate.

FIG.1- FORWARD CURRENT DERATING CURVE

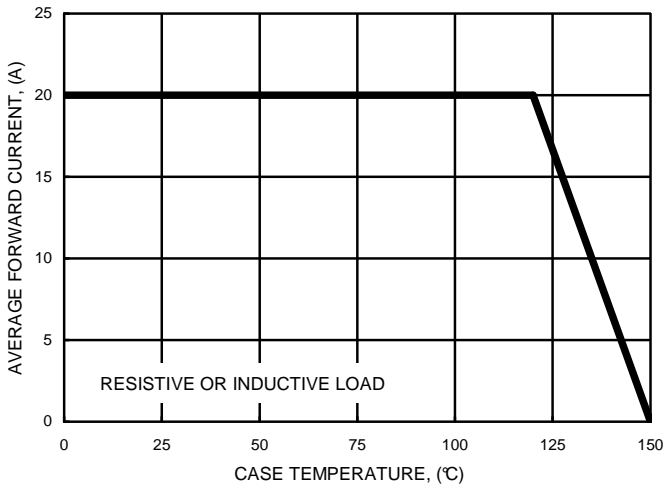


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

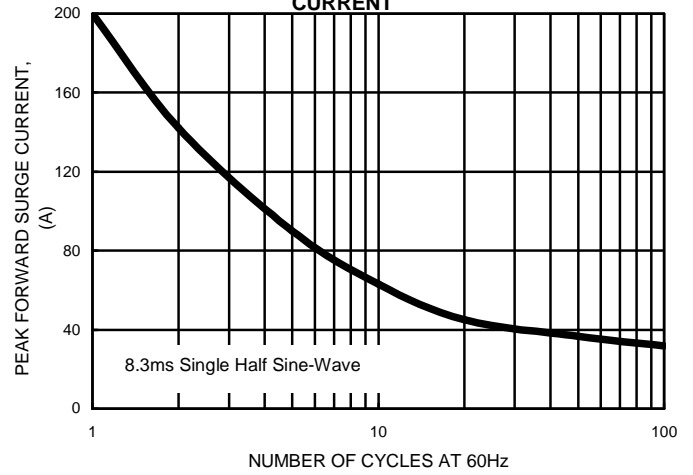


FIG.3- TYPICAL JUNCTION CAPACITANCE

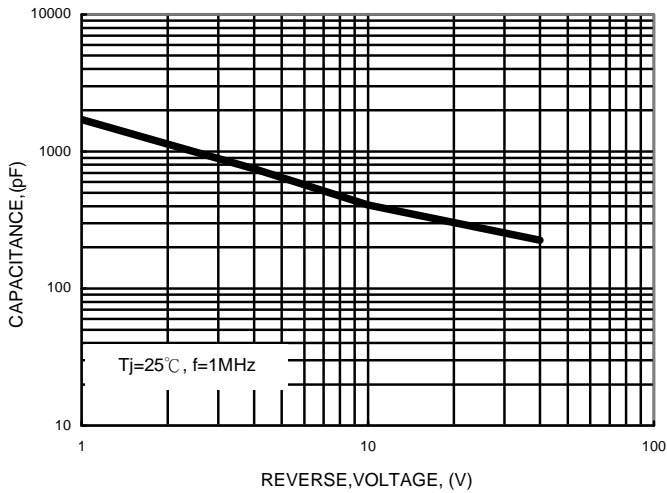


FIG.4- TYPICAL FORWARD CHARACTERISTICS

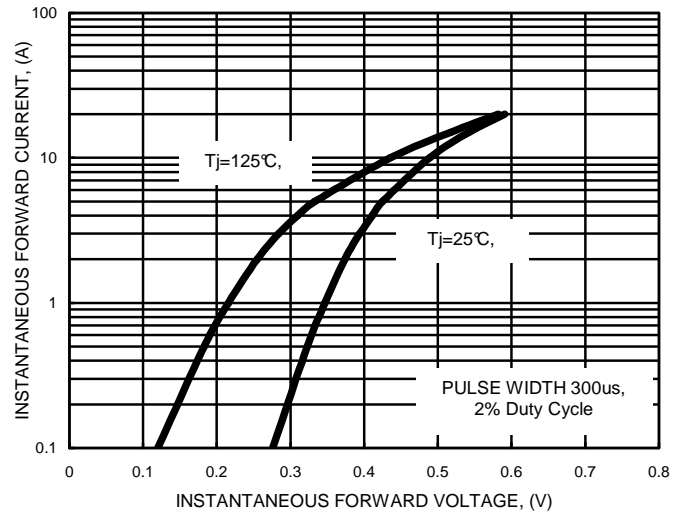
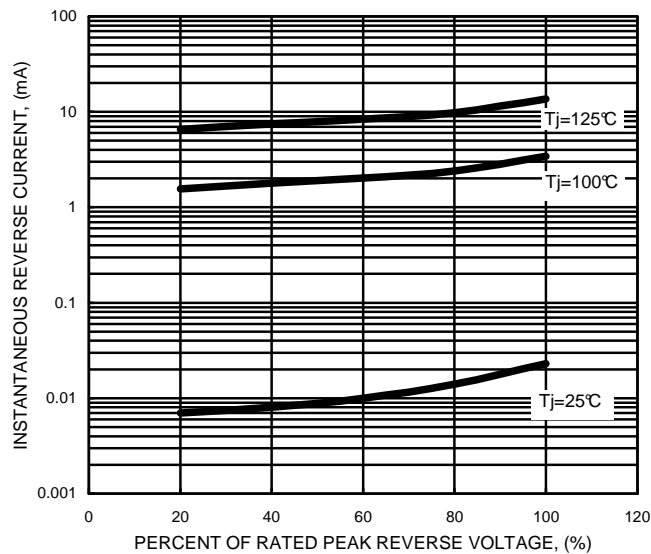


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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