



Schottky Rectifiers

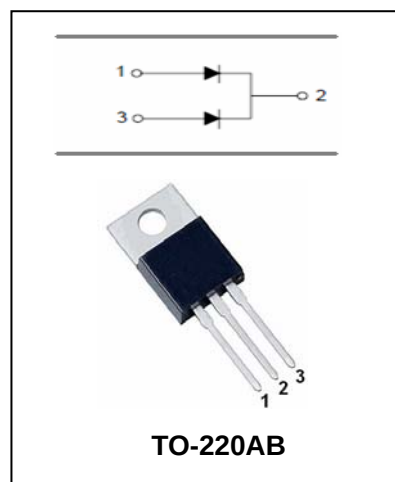
T10PS20C---T10PS100C

FEATURES

- Low leakage.
- Low forward voltage drop.
- Super long operating life.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.



Lead-free



TO-220AB

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	T10P S20C	T10P S30C	T10P S40C	T10P S45C	T10P S50C	T10P S60C	T10P S90C	T10P S100C	Unit
V _{RRM}	Recurrent Peak Reverse Voltage	20	30	40	45	50	60	90	100	V
V _{DC}	DC Blocking Voltage	20	30	40	45	50	60	90	100	V
I _{F(AV)}	Average Forward Rectified Current @T _A =25°C	10								A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave Superimposed on Rsted Load	300								A
R _{θJA}	Thermal Resistance to ambient	50								K/W
R _{θJC}	Thermal Resistance to case	2								K/W
T _j	Operating Junction Temperature Range	-55 to +150								°C
	In DC Forward Mode ≤1h (Note 1)	+200								
T _{stg}	Storage Junction Temperature Range	-55 to +150								°C

Note: 1.Meets the requirements of IEC 61215 Ed.2 bypass diode thermal test.



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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	T10P S20C	T10P S30C	T10P S40C	T10P S45C	T10P S50C	T10P S60C	T10P S90C	T10PS 100C	UNIT
Forward Voltage	V _F	I _F =5A T _A =25°C(max.)	0.55			0.58	0.7		0.85		V
		I _F =5A T _A =125°C(typ.)	0.38			0.42	0.58		0.68		
Reverse Current	I _R	T _A =25°C	0.5				0.5				mA
		T _A =100°C	50				30				
		75°C,50% V _{RRM} (typ.)	1				0.5				

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

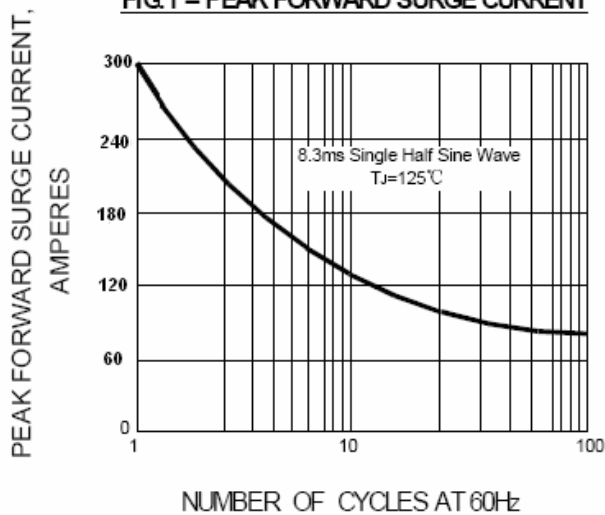


FIG.2 – FORWARD CURRENT DERATING CURVE

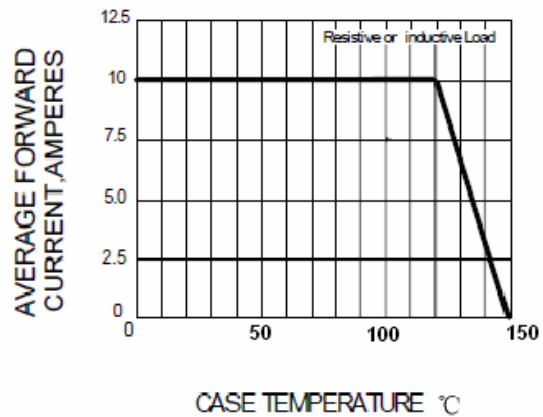


FIG.3 TYPICAL FORWARD CHARACTERISTIC

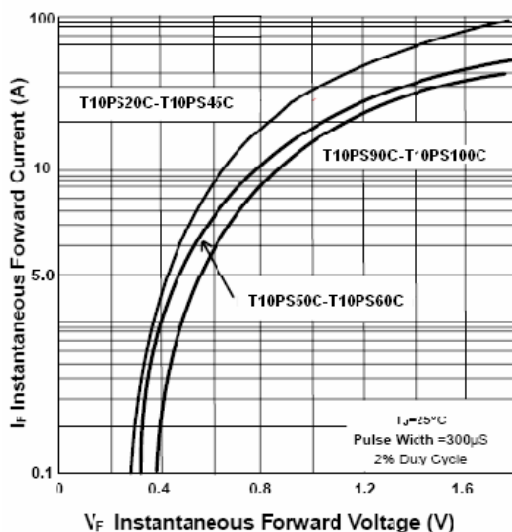
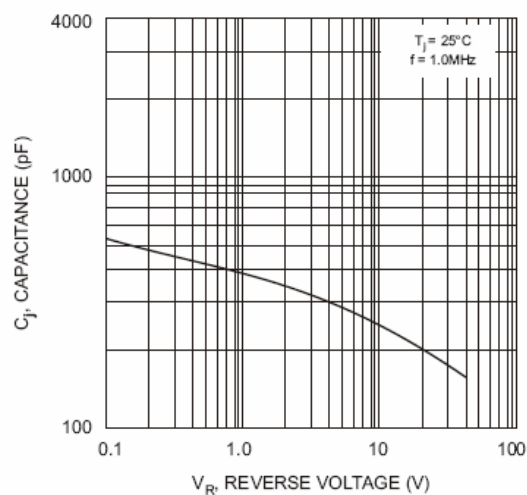


FIG.4 Typical Junction Capacitance





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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

