

DATA SHEET

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 45 Volts

CURRENT 20.0 Amperes

TO-220AB

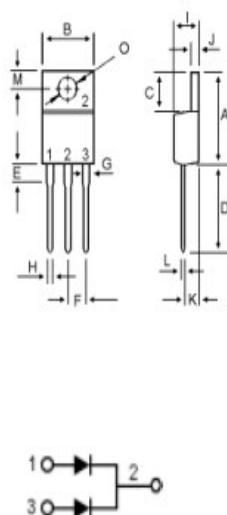
Unit:mm

FEATURES

- Low Forward Voltage Drop.
- Guard-Ring for Stress Protection.
- High Current Capability.
- Low Power Loss, High Efficiency.

MECHANICAL DATA

- Case: TO-220AB Molded Plastic
- Polarity: Symbols molded or marked on body
- Mounting position : Any



DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	5.02	6.52
D	13.06	14.62
E	3.57	4.07
F	2.42	2.66
G	1.12	1.36
H	0.72	0.96
I	4.22	4.98
J	1.14	1.38
K	2.20	2.98
L	0.33	0.55
M	2.48	2.98
O	3.70	3.90

In compliance with EU RoHS 2002/95/EC directives

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic			Symbol	P20L45CT	Unit
Peak Repetitive Reverse Voltage			VRRM		
Working Peak Reverse Voltage			VRWM	45	V
DC Blocking Voltage			VR		
Maximum RMS Voltage			VRMS	31.5	V
Average Rectified Forward Current (Rated VR=20Khz Square Wave)-50% duty cycle			I(AV)	20	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)			IFSM	180	A
Maximum forward voltage	IF=10A	T _J = 25°C	VF	0.47	V
		T _J = 125°C		0.42	
Maximum DC Reverse Current @TC=25°C at Rated DC Blocking Voltage @TC=125°C			IR	0.5 100	mA
Typical Thermal Resistance			R _{0JC}	2.0	°C/W
Operating Temperature Range			T _J	-65 to +150	°C
Storage Temperature Range			T _{STG}	-65 to +150	°C

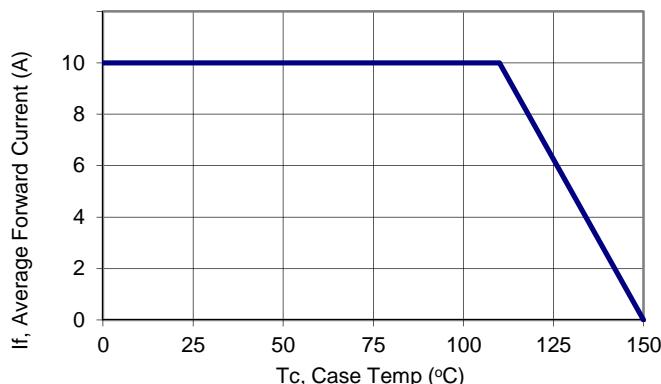


Figure 1: Current Derating, Case

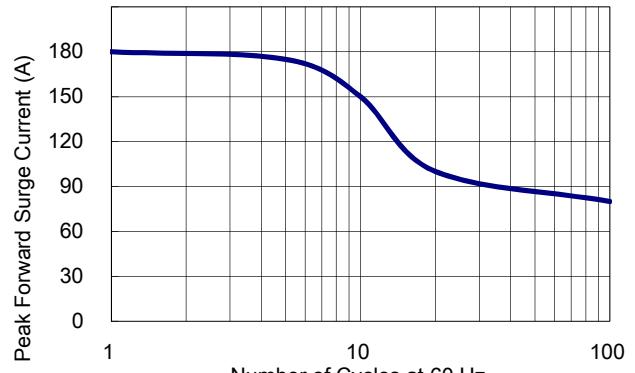


Figure 2: Maximum Repetitive Surge Current

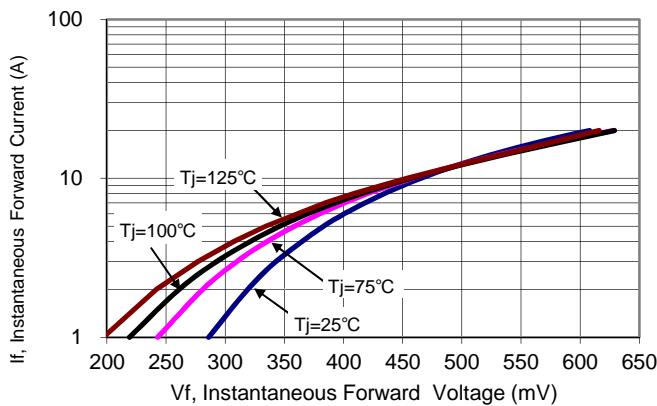


Figure 3: Typical Forward Voltage

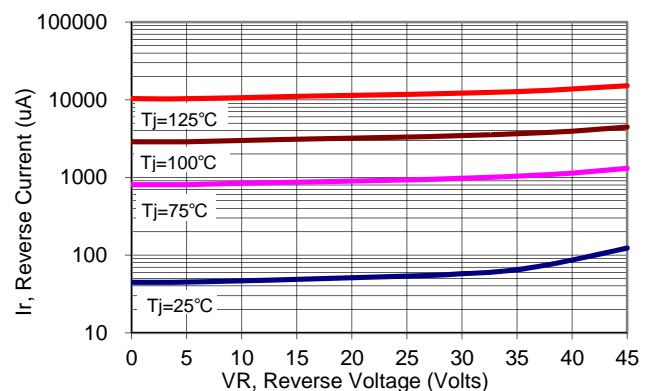


Figure 4: Typical Reverse Current

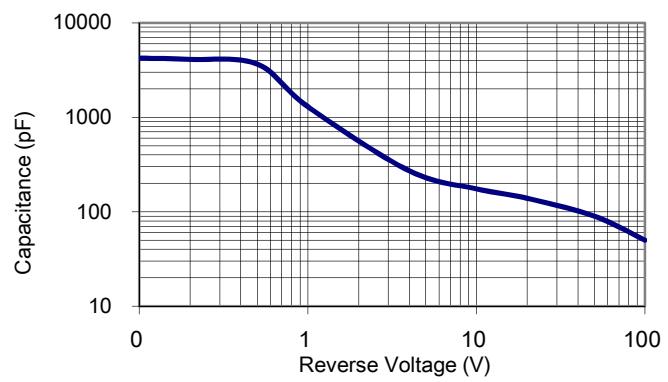


Figure 5: Typical Junction Capacitance