

S20C70CE Thru S20C100CE

Schottky Barrier Power Rectifiers

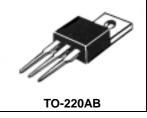
Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as free wheeling and polarity protection diodes.

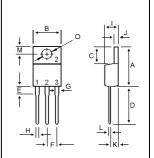
- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 150 Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory

MAXIMUM RATINGS						
Characteristic	Symbol	S20C				Funit
		70CE	80CE	90CE	100CE	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	70	80	90	100	V
RMS Reverse Voltage	V _{R(RMS)}	49	56	63	70	V
Average Rectifier Forward Current Total Device (Rated V _R),T _C =100	I _{F(AV)}			0		A
Peak Repetitive Forward Current (Rate V _R , Square Wave, 20kHz)	I _{FM}	20			A	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I _{FSM}	200		A		
Operating and Storage Junction Temperature Range	Т _Ј , Т _{STG}		-65 to	+150		

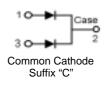
ELECTRIAL CHARACTERISTICS

Characteristic	Symbol -	S20C				Unit
Characteristic		70CE	80CE	90CE	100CE	Onit
$\begin{array}{l} \mbox{Maximum Instantaneous Forward Voltage} \\ (I_F = 10 \mbox{ Amp } T_C = 25) \\ (I_F = 10 \mbox{ Amp } T_C = 125) \end{array}$	V _F		75 68	-	80 73	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I _R	0.5 30		-		mA



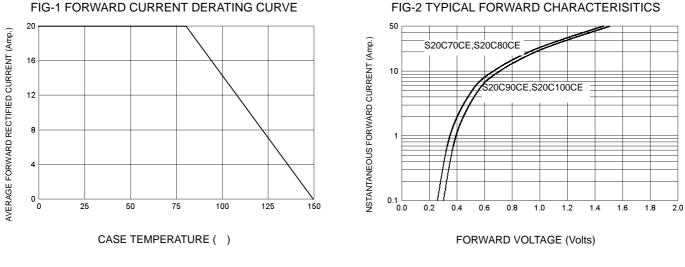


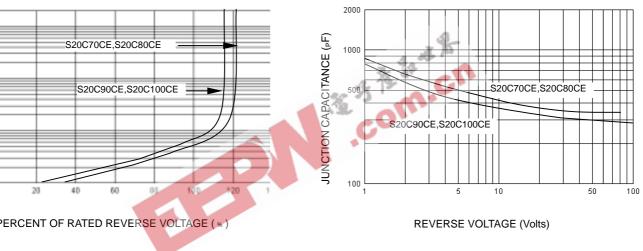
1							
	DIM	MILLIMETERS					
		MIN	MAX				
	А	14.68	15.32				
	В	9.78	10.42				
	С	5.02	6.52				
	D	13.06	14.62				
	Е	3.57	4.07				
	F	2.42	2.66				
	G	1.12	1.36				
	н	0.72	0.96				
	I	4.22	4.98				
	J	1.14	1.38				
	Κ	2.20	2.98				
	L	0.33	0.55				
	Μ	2.48	2.98				
	0	3.70	3.90				





20 AMPERES 70-100 VOLTS





100

NSTANTANEOUS REVERSE CURRENT (mA.) .D1 PERCENT OF RATED REVERSE VOLTAGE (%) FIG-5 PEAK FORWARD SURGE CURRENT 200 PEAK FORWARD SURGE CURRENT (Amp.) 175 150 125 100

FIG-3 TYPICAL REVERSE CHARACTERISTICS

20

10

1

3

75 50 25 0 10

NUMBER OF CYCLES AT 60 Hz

FIG-2 TYPICAL FORWARD CHARACTERISITICS

FIG-4 TYPICAL JUNCTION CAPACITANCE