

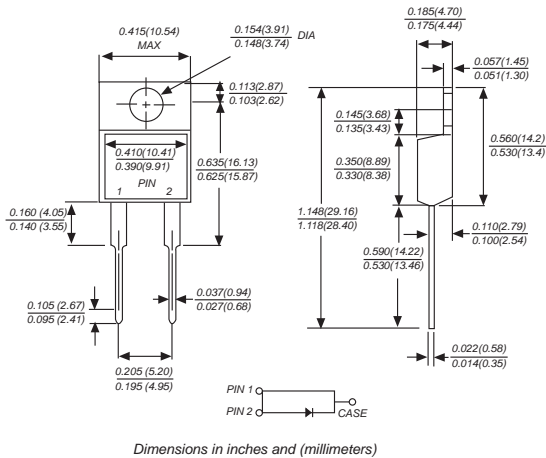


MBR720 THRU MBR7100

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 7.5 Amperes

TO-220AC



FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: TO-220AC molded plastic body
Terminals: Leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.064 ounce, 1.81 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	MBR 720	MBR 730	MBR 740	MBR 745	MBR 750	MBR 760	MBR 770	MBR 780	MBR 790	MBR 7100	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	70	80	90	100	VOLTS	
Maximum RMS voltage	V_{RMS}	14	21	28	32	35	42	49	56	63	70	VOLTS	
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	70	80	90	100	VOLTS	
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	7.5										Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0										Amps	
Maximum instantaneous forward voltage at 7.5A	V_F	0.65		0.75		0.85						Volts	
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	1.0		15.0		50.0						mA	
Typical junction capacitance (NOTE 1)	C_J	300		250								pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	3.0										°C/W	
Operating junction temperature range	T_J	-50 to +125					-50 to +150						°C
Storage temperature range	T_{STG}	-50 to +150										°C	

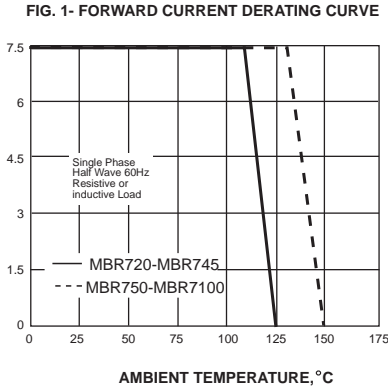
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case

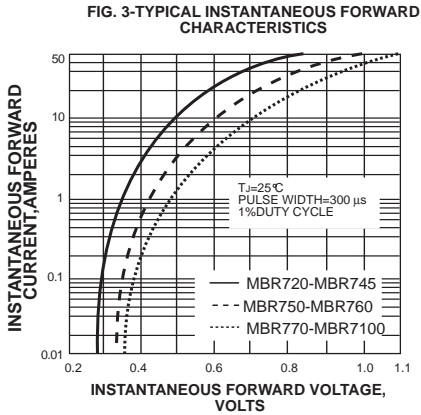
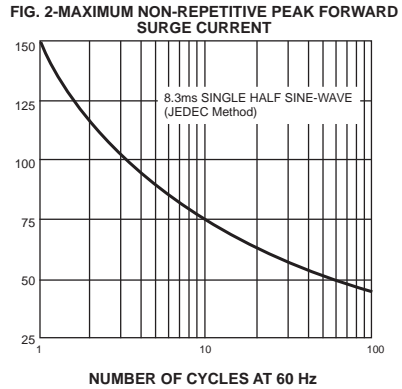


RATINGS AND CHARACTERISTIC CURVES MBR720 THRU MBR7100

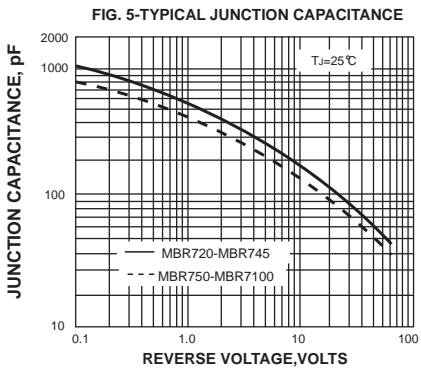
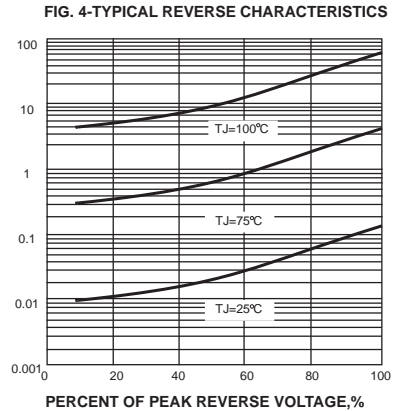
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



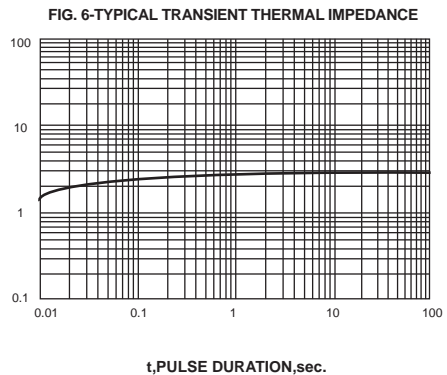
PEAK FORWARD SURGE CURRENT,
AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,
°C/W



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)

