沛倫股份有限公司
Compact Technology Corp.

MBR40200PTS

SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE 200 Volts FORWARD CURRENT 40 Amperes

FEATURES

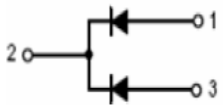
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Effciency
- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability

MECHANICAL DATA

- Case: TO-247
- Polarity: As Marked

TO-247

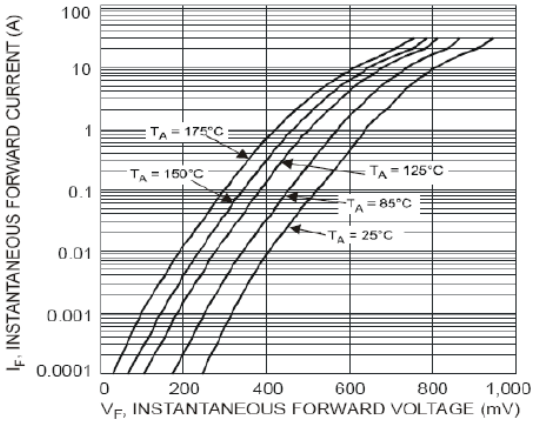
1、ANODE
2、CATHODE
3、ANODE



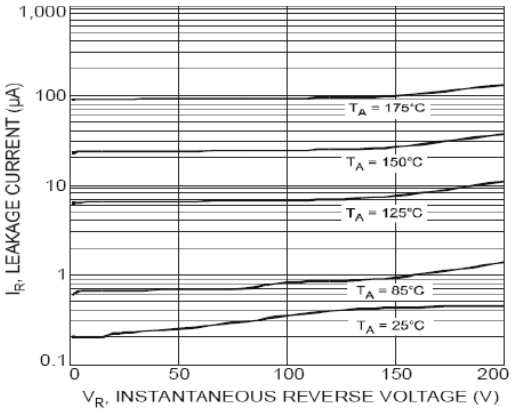
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Characteristics	Symbol	MBR40200PTS	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RWM}		V
DC Blocking Voltage	V_R		V
Maximum Instantaneous Forward Voltage I_F=20A T_C=25°C I_F=20A T_C=125°C	V_F	0.94 0.82	V
Peak Reverse Current T_C=25°C at Rated DC Blocking Voltage T_C=125°C	I_R	0.1 6	mA
Average Output Rectifie Current (per leg) (total device)	I_F	20 40	A
Non-Repetitive Peak Surge Current Surge applied at rated load conditions halfwave,single phase,60H_Z	I_{FSM}	350	A
Maximum Thermal Resistance	$R_{\theta JC}$	1.5	°C/W
	$R_{\theta JA}$	60	
Junction and StorageTemperature Range	T_J, T_{STG}	-65 to +150	°C

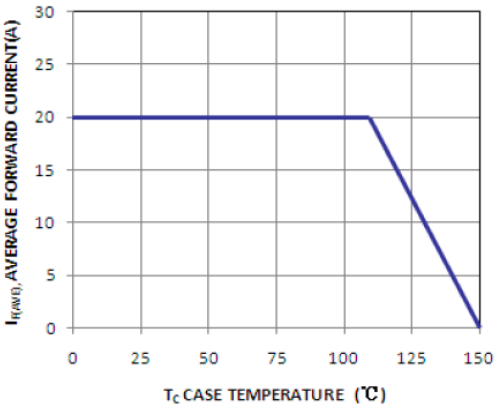
Rating and Characteristic Curves



Typical Forward Voltage Per Diode

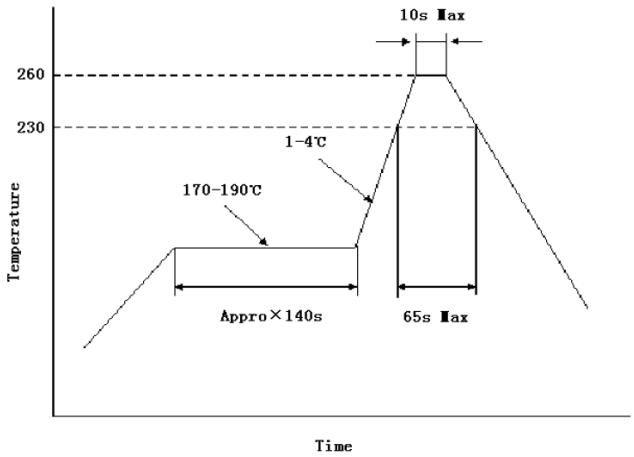


Typical Reverse Current Per Diode



Average Forward Forward Current vs.

Case Temperature Per Diode



Reflow Soldering Temperature Profile

TO-247 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.60		5.15	A1	1.30		1.60
b	2.86		3.26	b1	1.86		2.26
b2		1.20		C		0.50	
D	19.00		21.00	E	15.45		15.75
E1	12.00		13.06	e		5.45	
L	14.00		14.60	L1	5.20		5.88
L2	24.00		24.40	L3	10.00		10.60
P		3.50		Q	2.30		2.70