MBR6040PT-AU

SCHOTTKY BARRIER RECTIFIERS

| VOLTAGE | 40 Volt | CURRENT | 60 Ampere |

TO-247AD / TO-3P

Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory
  Flammability Classification 94V-O
  Flame Retardant Epoxy Molding Compound
- Low power loss, high efficiency
- High current capability
- For use in low voltage, high frequency inverters
  free wheeling, and polarlity protection applications
- Acqire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-247AD / TO-3P molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Weight: 0.2245 ounces, 6.3673 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Current	$I_{F(AV)}$	60	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400	A
Maximum Forward Voltage at 30A per leg	V_F	0.7	V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=100°C	I_R	0.1 20	mA
Typical Thermal Resistance	$R_{\theta JC}$	1.5	°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

Note :
Both Bonding and Chip structure are available.

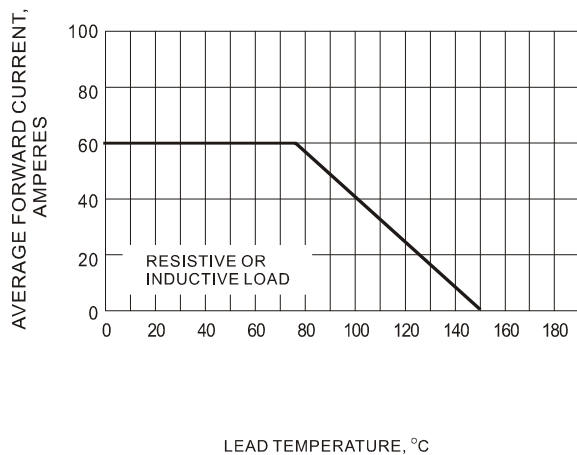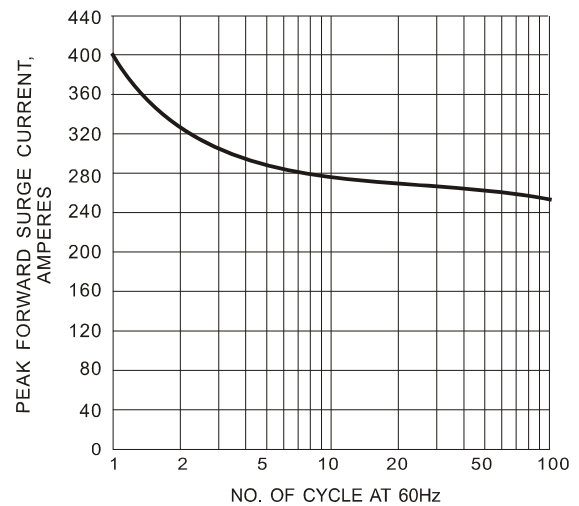## RATING AND CHARACTERISTIC CURVES

Fig.1- FORWARD CURRENT DERATING CURVE

Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

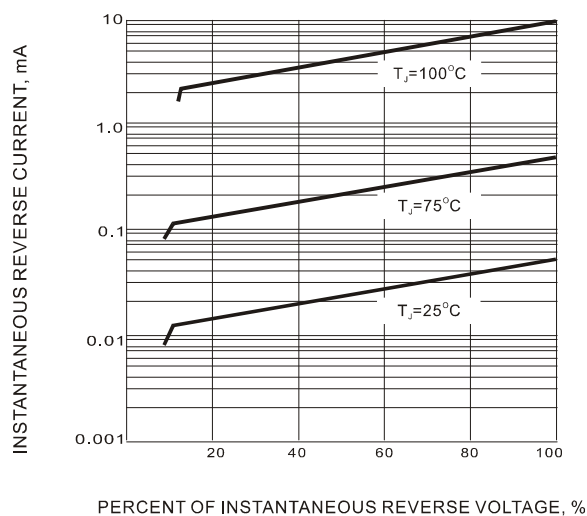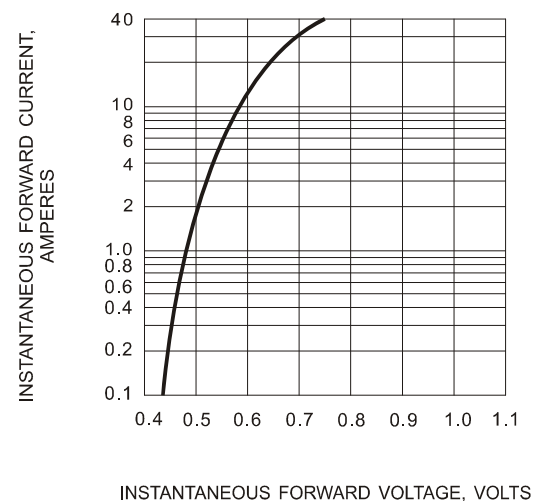Fig.3- TYPICAL REVERSE CHARACTERISTIC

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Part No_packing code_Version

MBR6040PT-AU_T0_000A1

MBR6040PT-AU_T0_100A1

For example :

RB500V-40_R2_00001

- Part No.
- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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