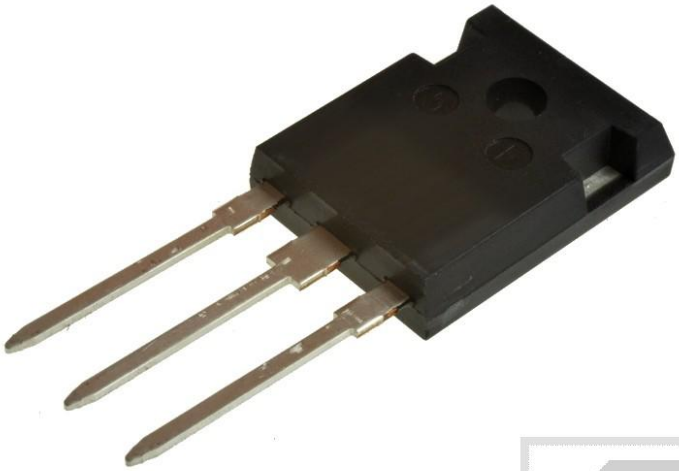
Dioda Schottky MBR4045PT (duodioda) 40A 45V GS TO-3P/TO-247AD Pbf



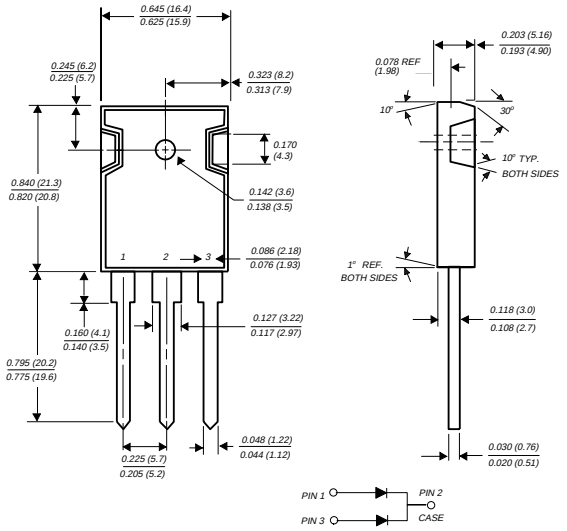
Dane techniczne:
Nazwa: MBR4045PT
Maksymalne napięcie wsteczne: 45 V
Maksymalne napięcie przewodzenia: 700mV
Maksymalny prąd przewodzenia: 40 A
Struktura półprzewodnika: podwójna, wspólna katoda
Obudowa: TO-247AD
Montaż: przewlekany(THT)

MBR4035PT THRU MBR4060PT

SCHOTTKY RECTIFIER

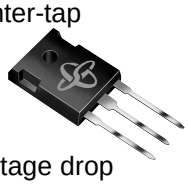
Reverse Voltage - *35 to 60 Volts* ***Forward Current -*** *40.0 Amperes*

TO-247AD



Dimensions in inches and (millimeters)

FEATURES



- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- Dual rectifier construction, positive center-tap
- Metal silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds, 0.17" (4.3mm) from case

MECHANICAL DATA

Case: JEDEC TO-247AD molded plastic body
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Mounting Torque: 10 in. - lbs. max.
Weight: 0.2 ounce, 5.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	*MBR4035PT*	*MBR4045PT*	*MBR4050PT*	*MBR4060PT*	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	60	Volts
Maximum working peak reverse voltage	V_{RMS}	35	45	50	60	Volts
Maximum DC blocking voltage	V_{DC}	35	45	50	60	Volts
Maximum average forward rectified current at T_C=125°C	$I_{(AV)}$	40.0				Amps
Peak repetitive forward current per leg at T_C=120°C (rated V_R square wave, 20 KHz)	I_{FRM}	40.0				Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400.0				Amps
Peak repetitive reverse surge current (NOTE1)	I_{RRM}	2.0		1.0		Amps
Maximum instantaneous forward voltage per leg at (NOTE 2) I_F=20A, T_C=25°C I_F=20A, T_C=125°C I_F=40A, T_C=25°C I_F=40A, T_C=125°C	V_F		0.70 0.60 0.80 0.75		0.72 0.62 – –	Volts
Maximum instantaneous reverse current at T_C=25°C rated DC blocking voltage per leg (NOTE 2) T_C=125°C	I_R	1.0 100.0				mA
Typical thermal resistance per leg (NOTE 3)	$R_{\Theta JC}$	1.2				°C/W
Voltage rate of change (rated V_R)	dv/dt	10,000				V/µs
Operating junction temperature range	T_J	-65 to +150				°C
Storage temperature range	T_{STG}	-65 to +175				°C

NOTES:
(1) 2.0µs pulse width, f=1.0 KHz
(2) Pulse test: 300µs pulse width, 1% duty cycle
(3) Thermal resistance from junction to case per leg

GENERAL SEMICONDUCTOR®

RATINGS AND CHARACTERISTIC CURVES MBR4035PT THRU MBR4060PT

FIG. 1 - FORWARD CURRENT DERATING CURVE

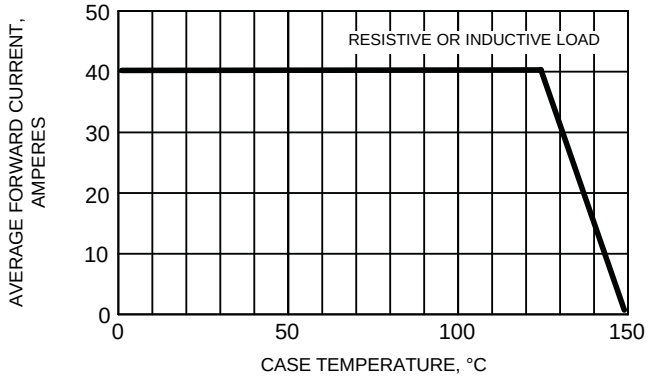


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

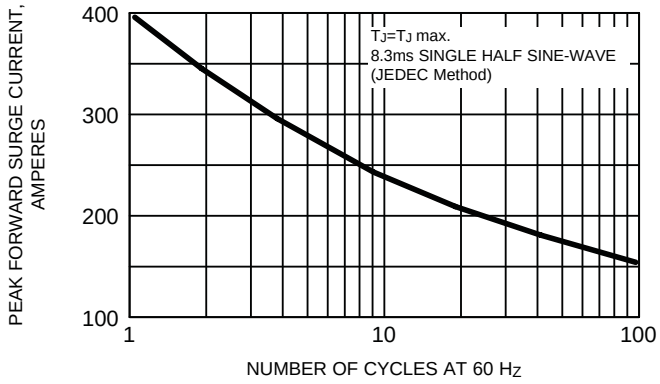


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER LEG

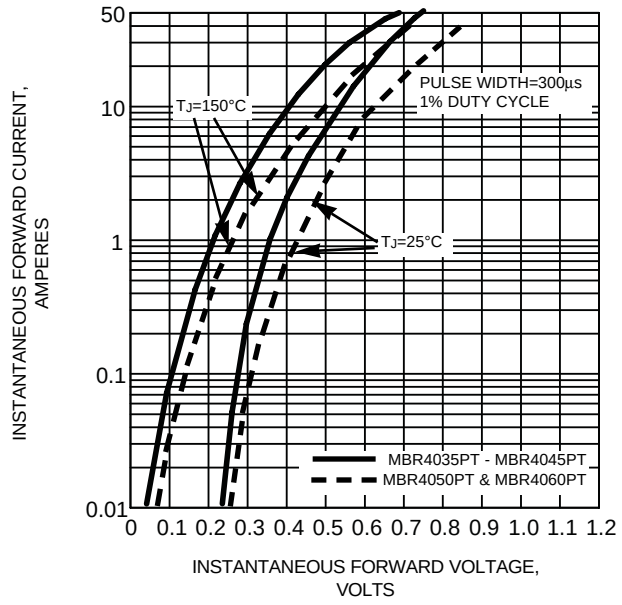


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

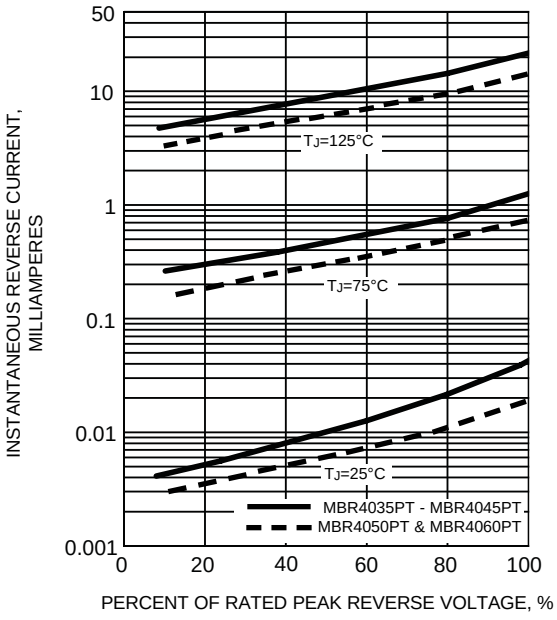


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

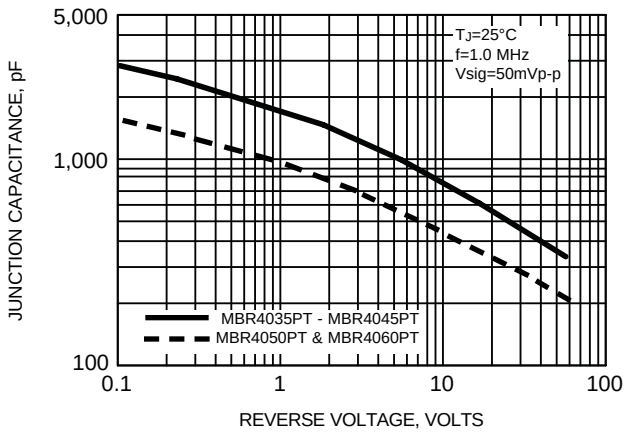
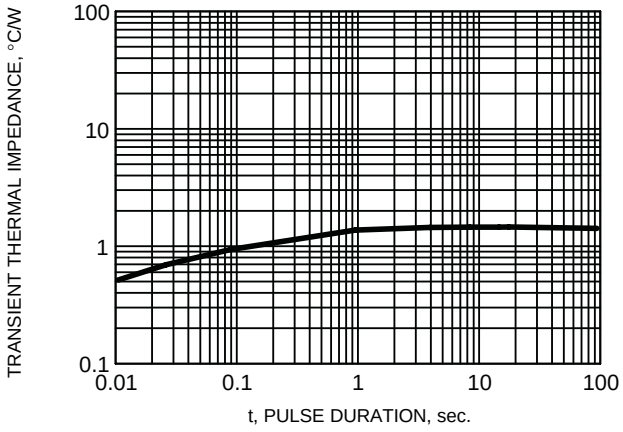


FIG . 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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