

DUAL SCHOTTKY RECTIFIERS

**VOLTAGE RANGE: 35 - 60 V
CURRENT: 16 A**

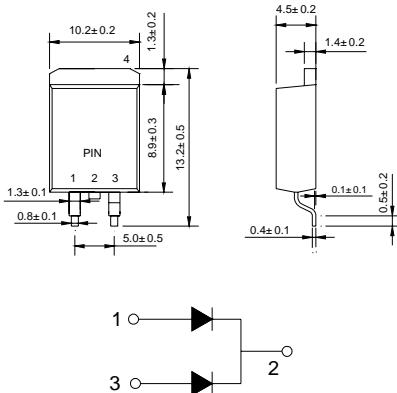
FEATURES

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

MECHANICAL DATA

- ◇ Case: JEDEC D²PAK, molded plastic body
- ◇ Terminals: Leads, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.087 ounces, 2.2 gram
- ◇ Position: Any

D²PAK



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

		MBRB 1635CT	MBRB 1645CT	MBRB 1650CT	MBRB 1660CT	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	35	45	50	60	V
Maximum RMS Voltage	V _{RMS}	25	32	35	42	V
Maximum DC blocking voltage	V _{DC}	35	45	50	60	V
Maximum average forward total device rectified current @T _C = 125°C	I _{F(AV)}		16.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}		150.0			A
Maximum forward voltage per leg (I _F =8.0A, T _C =25°C) (I _F =8.0A, T _C =125°C) (NOTE 1)	V _F	0.63 0.57		0.75 0.65		V
Maximum reverse current @T _C =25°C at rated DC blocking voltage @T _C =125°C	I _R	0.2 40		1.0 50		m A
Maximum thermal resistance (NOTE 2)	R _{θJC}		1.5			°C/W
Operating junction temperature range	T _J		-55 ---- +150			°C
Storage temperature range	T _{STG}		-55 ---- +175			°C

NOTE: 1. Pulse test: 300μs pulse width, 1% duty cycle.

2. Thermal resistance from junction to case and thermal resistance from junction to ambient.

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RATINGS AND CHARACTERISTIC CURVES

MBRB1635CT---MBRB1660CT

FIG.1 – FORWARD CURRENT DERATING CURVE

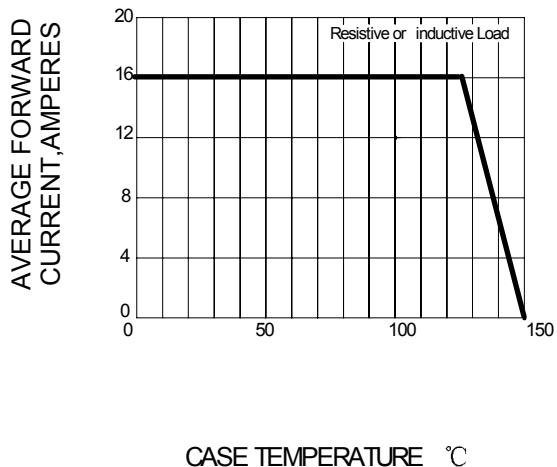


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

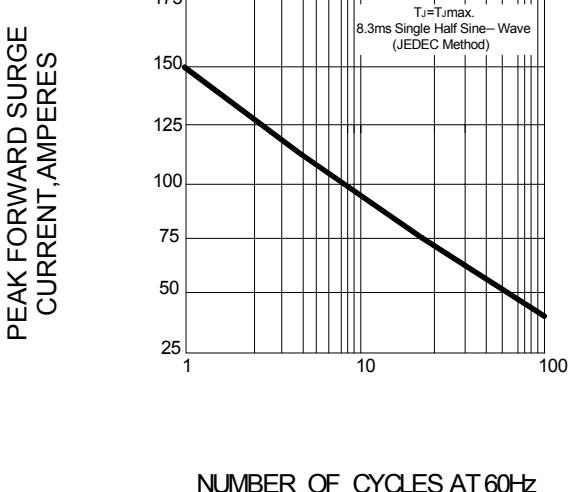


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PERLEG

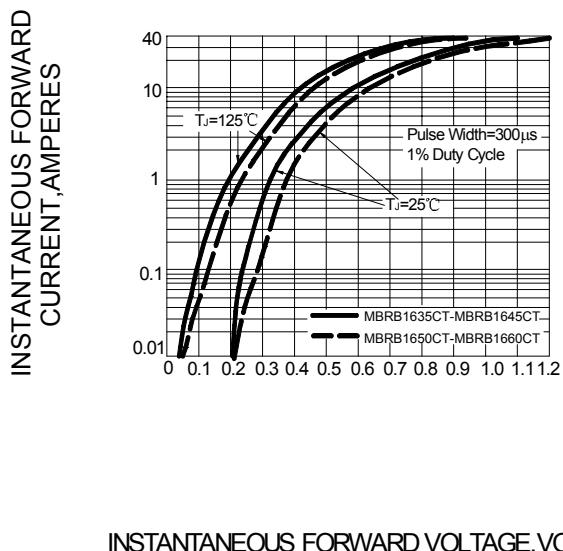
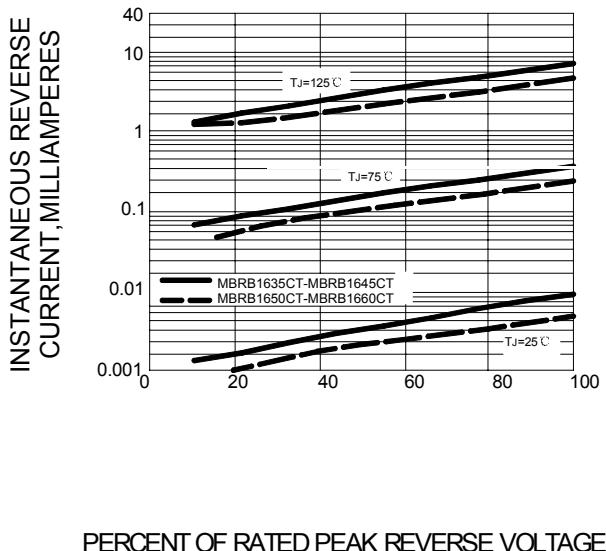


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

PERCENT OF RATED PEAK REVERSE VOLTAGE, %