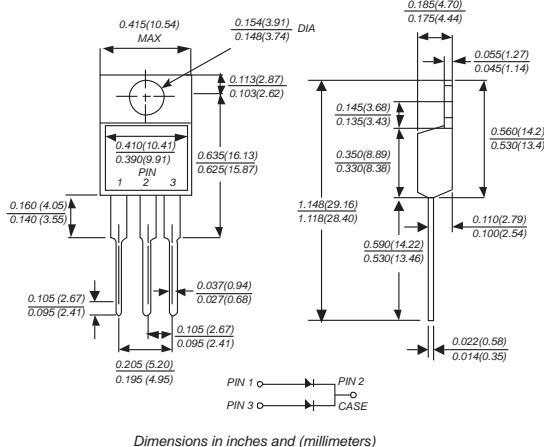


TO-220AB



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-220AB molded plastic body**Terminals:** Leads solderable per MIL-STD-750, Method 2026**Polarity:** As marked**Mounting Position:** Any**Weight:** 0.08 ounce, 2.24 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%.

	SYMBOLS	MBR 2040CT	MBR 2045CT	MBR 2060CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	28	32	42	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	40	45	60	100	150	200	VOLTS
Maximum average forward rectified current at T _c (see fig.1)	I _(AV)	20.0						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 10.0A	V _F	0.60		0.70	0.85	0.93		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	1.0						mA
Typical junction capacitance (NOTE 1)	C _J	15.0		50.0				pF
Typical thermal resistance (NOTE 2)	R _{qjc}	2.0						°C/W
Operating junction temperature range	T _J	-65 to +125		-65 to +150				°C
Storage temperature range	T _{STG}	-65 to +150						°C

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

2. Thermal resistance from junction to case

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

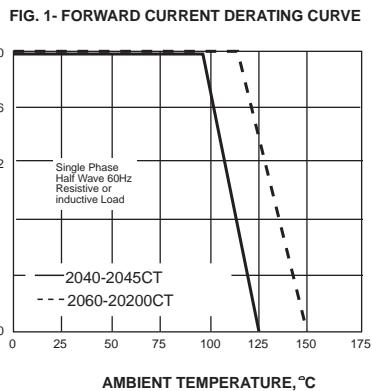
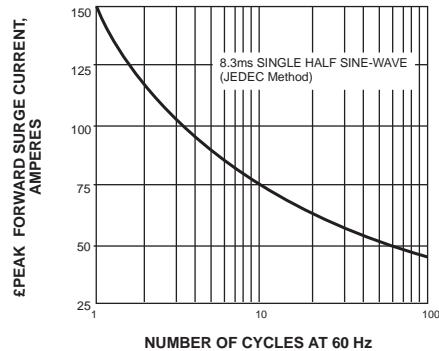


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, (A)

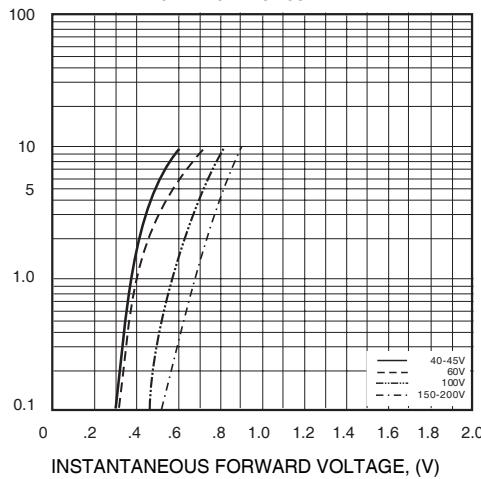
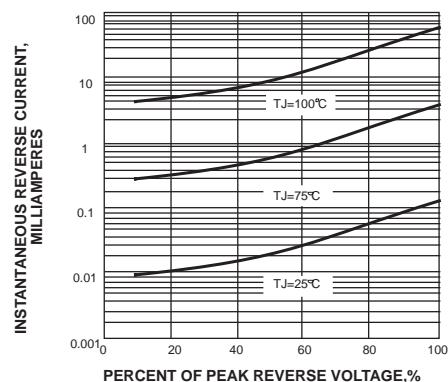
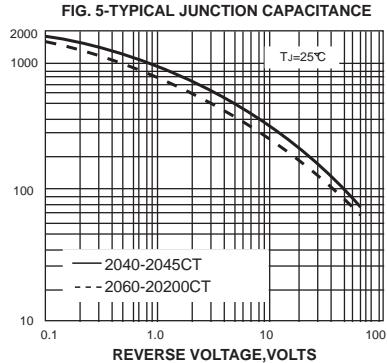


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W

