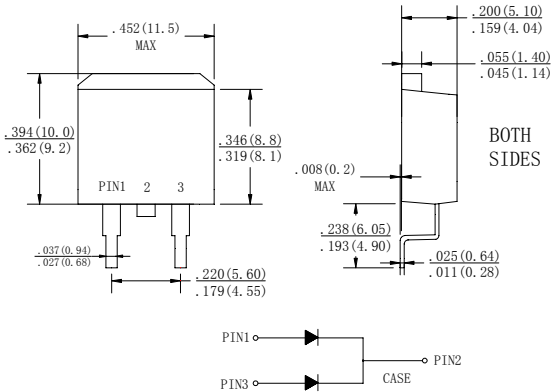


PV2045

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 Volts Forward Current - 20.0 Amperes

T0-263



Dimensions in inches and (millimeters)

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: 260°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: T0-263 molded plastic body
 Terminals: Leads solderable per MIL-STD-750, Method 2026
 Polarity: As marked
 Mounting Position: Any
 Weight: 1.426 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	PV2045	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	45	VOLTS
Maximum RMS voltage	V_{RMS}	32	VOLTS
Maximum DC blocking voltage	V_{DC}	45	VOLTS
Maximum average forward rectified current (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}	300	Amps
Maximum instantaneous forward voltage at 20A	V_F	0.55	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.5 50	mA
Rating for Fusing $1\text{ms} \leq t < 8.3\text{ms}$	$I^2 t$	511	A^2s
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	1.5	$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +200	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

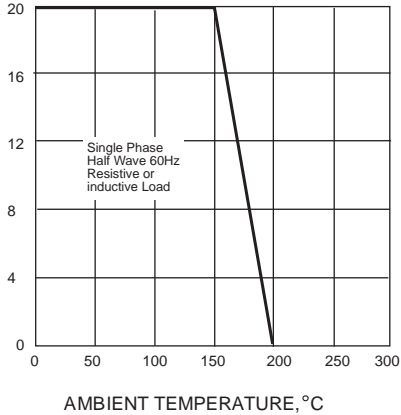
Note:

1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES PV2045

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

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

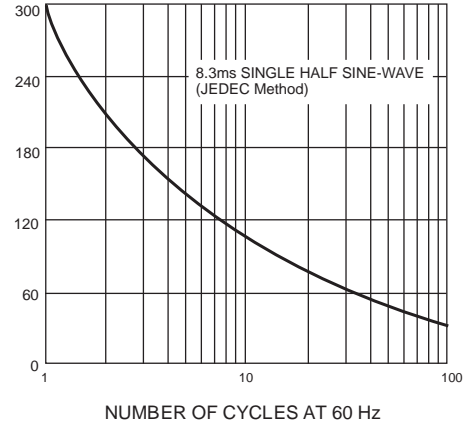
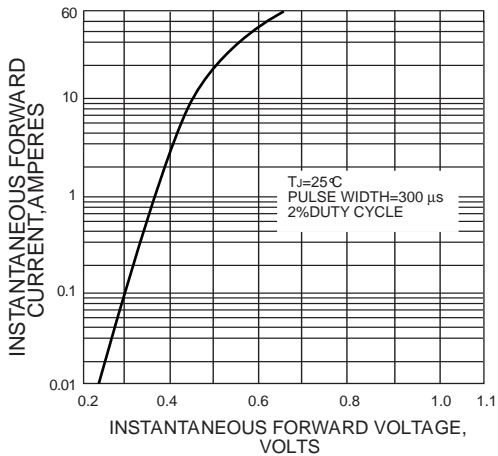


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

