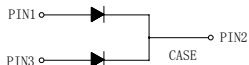
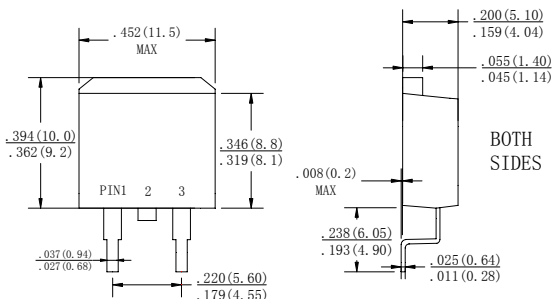


# PV3045

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 Volts Forward Current - 30.0 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	PV3045	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)	$I_{(AV)}$	30.0	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 30A	$V_F$	0.55	Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.5 50	mA
Rating for Fusing $1\text{ms} \leq t < 8.3\text{ms}$	$I^2 t$	511	$\text{A}^2\text{s}$
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	2.0	$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +200	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

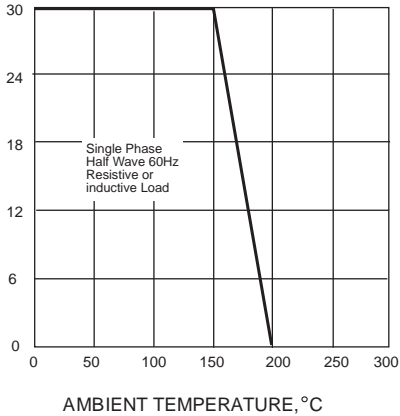
#### Note:

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

# RATINGS AND CHARACTERISTIC CURVES PV3045

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

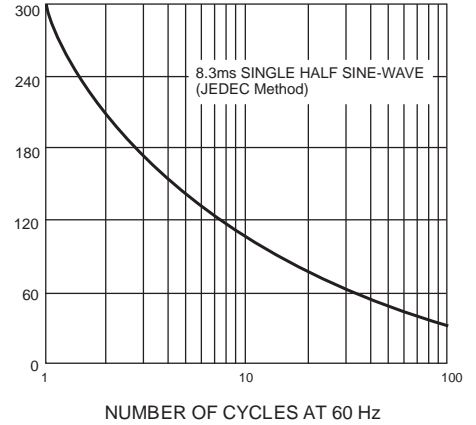
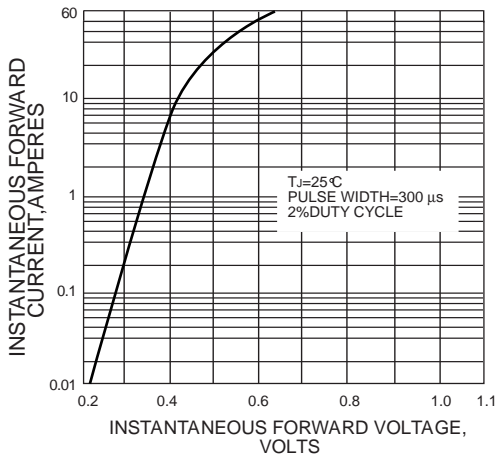


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

