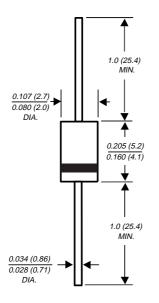
ADVANCED INFORMATION

P4KE530 AND P4KE550

TRANSZORBTM TRANSIENT VOLTAGE SUPPRESSOR

Steady State Power - 1Watt Reverse Voltage - 530, 550 Volts

DO-204AL



Dimensions are in inches and (millimeters)

Available in uni-directional only

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ♦ Protects TOPSwitch[®]
- Glass Passivated Junction
- ♦ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ◆ Exellent Clamping capability
- Available in unidirectional only

MECHANICAL DATA

Case: JEDEC DO-204AL molded plastic body over

passivated junction

Terminals: Axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: The color band denotes the cathode, which is positive with respect to the anode under normal TVS

operation

Mounting Position: Any Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

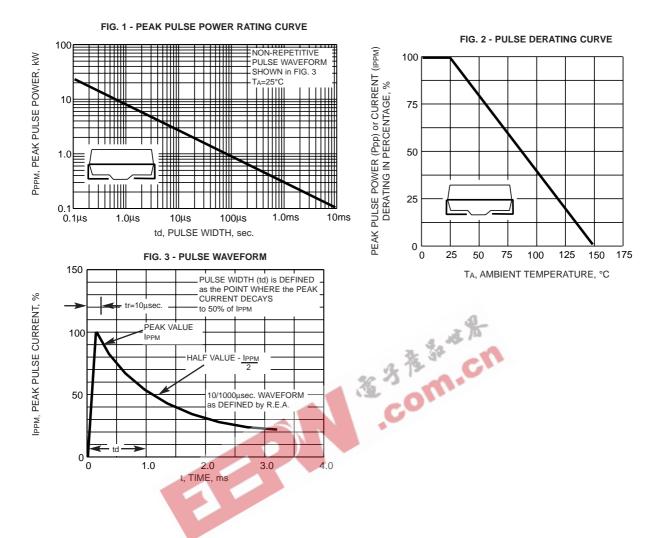
		SYMBOLS	P4KE530	P4KE550	UNITS
Steady state power dissipation (NOTE 3)		P _{M(AV)}	1.0		Watts
Peak pulse power dissipation (NOTE 1,2, FIG.1)		P _{PPM}	Minimum 300		Watts
Minimum breakdown voltage at 100μA		V(BR)	530	550	Volts
Maximum clamping voltage at 300mA, 10/1000 μs-waveform		Vc	660		Volts
Stand-off voltage		Vwm	477	495	Volts
Maximum DC reverse leakage current at V _{WM}		I _D	5.0		μΑ
Typical temperature coefficient of V _(BR)			650		mV°C
Typical capacitance (NOTE 4)	at 0V at 200V	CJ	75 45		pF
Operating junction and storage temperature range		TJ, TSTG	-55 to +150		°C

NOTES

- (1) Non-repetitive current pulse, per Fig.3 and derated above 25°C per Fig. 2
- (2) Peak pulse power waveform is 10/100μS
- (3) Lead temperature at 75°C=TL
- (4) Measured at 1MHz



MAXIMUM RATINGS AND CHARACTERISTIC CURVES P4KE530 AND P4KE550



APPLICATION NOTES

- Respect Thermal Resistance (PCB Layout) as the temperature coefficient also contributes to the clamping voltage.
- Select minimum breakdown voltage, so you get acceptable power dissipation and PCB tie point temperature. Devices with higher breakdown voltage will have a shorter conduction time and will dissipate less power.
- Clamping voltage is influenced by internal resistance design approximation is 7V per 100mA slope.
- Keep temperature of TVS lower than TOPSwitch® as a recommendation.
- Maximum current is determined by the maximum T_J and can be higher than 300mA. Contact supplier for different clamping voltage / current arrangements.
- Minimum breakdown voltage can be customized for other applications.
 Contact supplier.

