



# Frontier Electronics Corp.

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## LOW CAPACITANCE 600W TRANSIENT VOLTAGE SUPPRESSORS

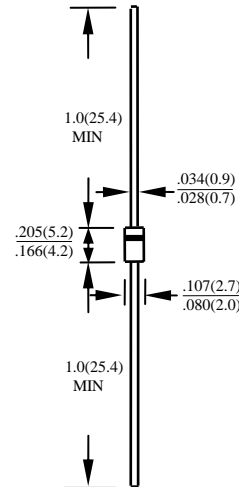
### LC P6KE6.8 THRU LC P6KE350

#### FEATURES

- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND
- DIFFUSED JUNCTION
- LOW COST
- LOW JUNCTION CAPACITANCE

#### MECHANICAL DATA

- CASE: TRANSFER MOLDED, DO41, DIMENSIONS IN INCHES AND (MILLIMETERS)
- LEADS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 0.34 GRAMS



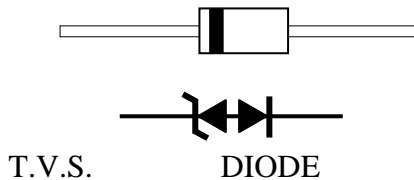
#### ABSOLUTE MAXIMUM RATING

CHARACTERISTICS	SYMBOL	CONDITIONS	T.V.S.	DIODE	UNITS
STORAGE TEMPERATURE RANGE	$T_{STG}$		-40 ~ 150	-40 ~ 150	°C
JUNCTION TEMPERATURE	$T_J$		150	150	°C
PEAK SURGE REVERSE POWER	$P_{RSM}$	Non-repetitive 10/1000 $\mu$ S	400	-	W
REPETITIVE PEAK VOLTAGE	$V_{RM}$		170	600	V

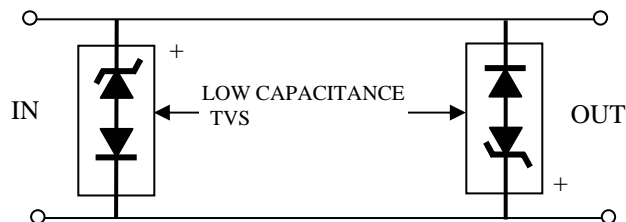
#### ELECTRICAL CHARACTERISTICS (UNLESS OTHERWISE STATED $T_c = 25^\circ\text{C}$ )

CHARACTERISTICS	SYMBOL	CONDITIONS	T.V.S.	DIODE	UNITS
LEAKAGE CURRENT	$I_R$	$V_R = V_{RM}$	Max. 5.0	Max. 5.0	$\mu$ A
REVERSE RECOVERY TIME	$t_{rr}$	IF/IR=0.1A/0.3A	-	Max. 500	nS
MAXIMUM JUNCTION CAPACITANCE AT 0 VOLTAGE	$C_j$		20		pf
STORAGE TEMPERATURE RANGE	$T_{STG}$		- 55 TO + 150		°C
OPERATING TEMPERATURE RANGE	$T_{OP}$		- 55 TO + 150		°C

#### NOTE : EQUIVALENT CIRCUIT



#### FIGURE 1 --AC Line Protection Application



APPLICATION NOTE : Devices must be used with two units in parallel, opposite in polarity as shown in circuit for AC Signal Line protection

# RATINGS AND CHARACTERISTIC CURVES LC P6KE6.8 THRU LC P6KE350

FIG. 1 - PEAK PULSE POWER RATING CURVE

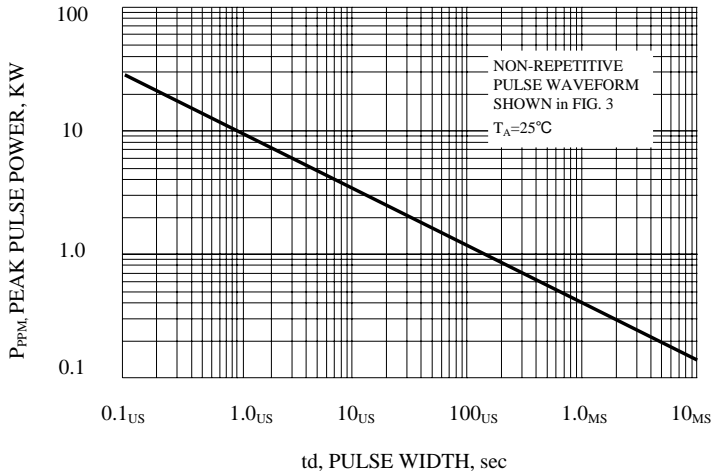


FIG. 2 - PULSE DERATING CURVE

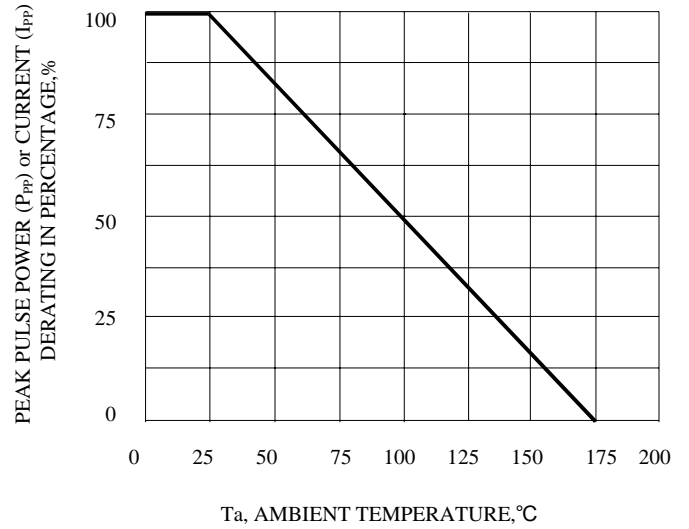


FIG. 3 - PULSE WAVEFORM

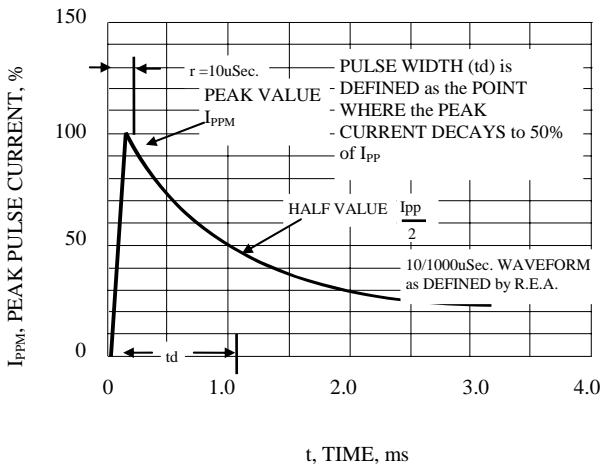


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

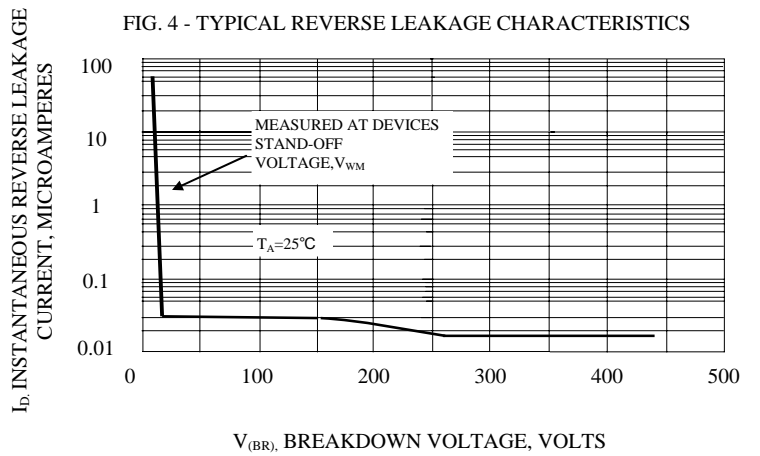


FIG. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL ONLY

