



SENSONETIX

Sensing today...with tomorrow's technology

VOLTAGE & LOAD DUMP SUPPRESSORS

175 to 325 Joule Surge Capacity
For 24V Automotive Electrical Systems



This series of Sensonetix' Transient Voltage Suppressors is specifically designed to protect automotive electrical systems against load-dump transients, while maintaining a predetermined clamping voltage. When the battery is removed from the charging unit, the low impedance alternator produces large, positive load-dump transients. Simultaneously, negative field-decay transients are generated by the collapsing field. If not absorbed and diverted to ground, these transients would propagate through the vehicle's electrical system, often with catastrophic results on integrated circuits, semiconductors, and other voltage-sensitive components.

Sensonetix' Types PRZ50T060 through PRZ95T060 are designed for use in 24-volt electrical systems. For other voltages, consult the factory.

- **Conforms to SAE J1113 for surge suppression**
- **Hermetically sealed TO-3 package**
- **Dielectrically isolated and passivated junctions to withstand unusually high surges at high temperatures**

ELECTRICAL SPECIFICATIONS (@ 25°C unless otherwise specified)

SPECIFICATIONS/CONDITIONS	SY MB OL	UNIT	TYPE									
			50T060		70T060		80T060		90T060		95T060	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Reverse Stand Off Voltage	V _R	Volts	—	36	—	36	—	36	—	36	—	36
Reverse Leakage at stand off voltage	I _R	μA	—	1000	—	1000	—	1000	—	1000	—	1000
Breakdown Voltage @ I _B =40 mA	V _B	Volts	38	42	38	42	38	42	38	42	38	42
Peak Pulse Circuit (See test circuit)	I _p	Amps	—	50	—	70	—	80	—	90	—	95
Clamping Voltage @ I _p	V _C	Volts	—	44	—	47	—	48	—	49	—	50
Transient Power Carrying Capacity (See test circuit. Maximum 10 consecutive cycles @ 1-minute intervals @ I _p . Also see Note 1.)	P _{TR}	Joules	—	175	—	225	—	260	—	300	—	325

NOTE 1: For Type 90T060 and 95T060, minimum 5-minute interval or 50°C case temperature maximum prior to each cycle.