

DIOTEC ELECTRONICS CORP 18020 Hobart Blvd., Unit B Gardena, CA 90248 U.S.A

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# 35 AMP OVERVOLTAGE TRANSIENT SUPPRESSORS

#### **FEATURES**

- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical ≤ 2%, Max. ≤ 10% of Die Area)
- LARGE DIE FOR HIGH POWER HEAVY DUTY PERFORMANCE
- HIGH HEAT HANDLING CAPABILITY WITH VERY LOW THERMAL STRESS
- PROPRIETARY JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- LOW FORWARD VOLTAGE DROP

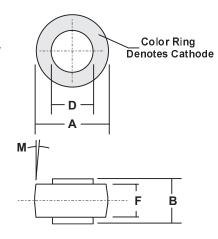
#### **MECHANICAL DATA**

- Case: Molded Epoxy (UL Flammability Rating 94V-O)
- Finish: All external surfaces are silver plated for corrosion resistance superior solderability
- Soldering Temperature: 210 °C maximum
- Mounting Position: Any
- . Polarity: Color band denotes cathode
- Weight: 0.06 Ounces (1.8 Grams)



### MECHANICAL SPECIFICATION

Die Size: 0.180" x 0.180" Square



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
Α	9.78	10.29	0.385	0.405
В	6.05	6.20	0.238	0.244
D	5.54	5.60	0.218	0.220
F	4.19	4.45	0.165	0.175
М	5° NOM		5° NOM	

## **MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS**

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz resistive or inductive load.

PARAMETER (TEST CONDITIONS)		RATINGS	UNITS
Series Number		TVS3527	
Maximum Recurrent Peak Reverse Voltage	VRRM		VOLTS
Working Peak Reverse Voltage	Vrwm	23	
Maximum DC Blocking Voltage	VDC		
Breakdown Voltage (IR = 100 mA dc, Tc = 25 °C)	V(BR)	24 Min / 32 Max	
Average Forward Rectified Current	lo	35	
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	IFSM	600	AMPS
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle ≤ 1.0%, Tc = 25 °C)	IRSM	110	
Instantaneous Forward Voltage Maximum (IF = 100A @ 300 µSec pulse, Tc = 25°C) Typical	VF	1.05 1.00	VOLTS
Maximum DC Reverse Current (VR = 20V DC, Tc = 25 °C)	lR	200	ńΑ
Maximum Thermal Resistance, Junction to Case (Note 1)	R⊎JC	0.8	°C/W
Junction Operating & Storage Temperature Range		-65 to +175	°C

Notes: 1) Single Side Cooled

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