DIOTEC ELECTRONICS CORP
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Data Sheet No. TSBD-3500D-1B

35 AMP OVERVOLTAGE TRANSIENT DISH DIODE

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

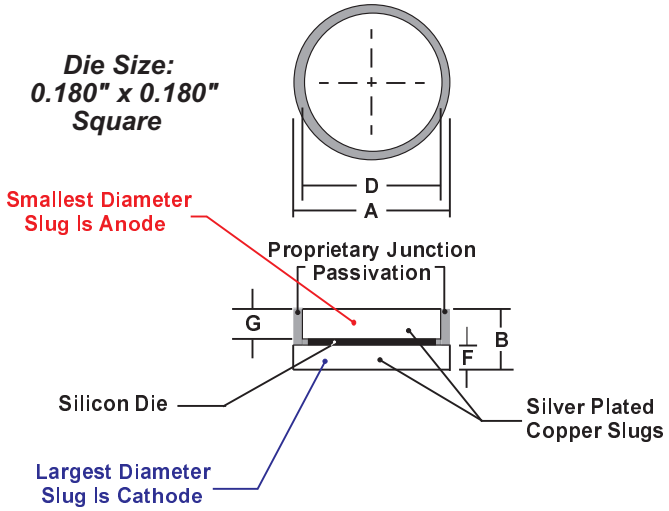
MECHANICAL DATA

- Finish: All external surfaces are silver plated for corrosion resistance superior solderability
- Soldering Temperature: 210 °C maximum
- Mounting Position: Any
- Weight: 0.06 Ounces (1.8 Grams)

RoHS COMPLIANT

MECHANICAL SPECIFICATION

Die Size: 0.180" x 0.180" Square



BIPOLAR ALSO AVAILABLE

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.41	5.51	0.213	0.217
B	1.95	2.05	0.077	0.081
D	4.77	4.87	0.188	0.192
F	0.64	0.76	0.025	0.030
G	0.96	1.09	0.038	0.043

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS	UNITS
Series Number		TVS3527D	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	23	VOLTS
Working Peak Reverse Voltage	V_{RWM}		
Maximum DC Blocking Voltage	V_{DC}		
Breakdown Voltage (I_R = 100 mA dc, Tc = 25 °C)	$V_{(BR)}$	24 Min / 32 Max	
Average Rectified Forward Current (Single phase, Resistive load, 60 Hz)	I_O	35	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, Single phase, 60 Hz sine applied to rated load)	I_{FSM}	500	
Repetitive Peak Reverse Surge Current (Time constant = 10 mSec Duty cycle ≤ 1.0%, Tc = 25 °C)	I_{RSM}	110	
Instantaneous Forward Voltage (I_F = 80A @300 μSec pulse, Tc = 25°C) Maximum / Typical	V_F	1.05 / 1.00	VOLTS
Maximum DC Reverse Current (V_R = 20V DC, Tc = 25 °C)	I_R	200	nA
Maximum Thermal Resistance, Junction to Slug (Note 1)	$R_{\theta JC}$	0.8	°C/W
Junction Operating & Storage Temperature Range	T_J,T_{STG}	-65 to +175	°C

3.01 tvs35d

Notes: 1) Single Side Cooled