

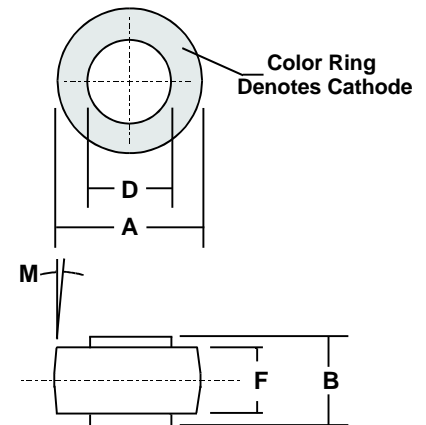


50 AMP OVERVOLTAGE TRANSIENT SUPPRESSORS

FEATURES

- PROPRIETARY **SOFT GLASS®** JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION
- INDUSTRY'S LARGEST DIE FOR HIGHEST POWER CAPABILITY
- Very low forward voltage drop
- Increased capacity by parallel operation
- Protects expensive automotive electronics and mobile equipment

Die Size:
0.216" Flat to Flat
Hex



MECHANICAL DATA

- Case: Transfer molded plastic
- Finish: All external surfaces are silver plated for corrosion resistance superior solderability
- Soldering Temperature: 250 °C maximum
- Mounting Position: Any
- Polarity: Color band denotes cathode
- Weight: 0.6 Ounces (1.8 Grams)

SOFT GLASS®
DIODE

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	8.43	8.69	0.332	0.342
B	5.94	6.25	0.234	0.246
D	5.46	5.71	0.215	0.225
F	4.19	4.45	0.165	0.175
M	5° NOM		5° NOM	

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz resistive or inductive load.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS	UNITS
Series Number		TVS5027S	
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, T _c = 25 °C)	V _(BR)	24 Min / 32 Max	
Average Forward Rectified Current	I _o	50	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	I _{FSM}	800	
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle ≤ 1.0%, T _c = 25 °C)	I _{RSM}	140	
Instantaneous Forward Voltage (I _F = 100A @ 300 μSec pulse, T _c = 25 °C)	V _F	1.05	VOLTS
Maximum DC Reverse Current (V _R = 20V DC, T _c = 25 °C)		1.00	
Maximum DC Reverse Current (V _R = 20V DC, T _c = 25 °C)	I _R	200	nA
Maximum Thermal Resistance, Junction to Case (Note 1)	R _{θJC}	0.8	°C/W
Junction Operating & Storage Temperature Range	T _J , T _{STG}	-65 to +175	°C

Notes: 1) Single Side Cooled

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