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## 25 AMP OVERVOLTAGE TRANSIENT SUPPRESSORS

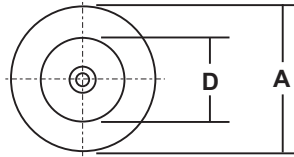
### FEATURES

- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical  $\leq 2\%$ , Max.  $\leq 10\%$  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

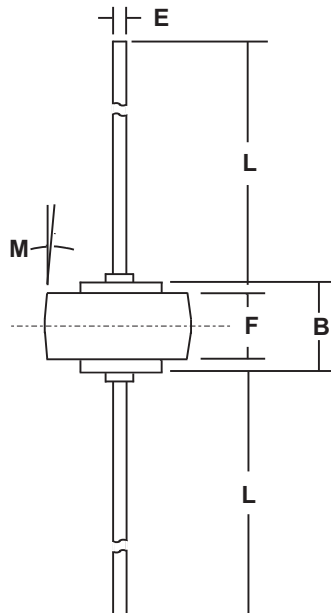
### MECHANICAL DATA

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Finish: All external surfaces are silver plated for corrosion resistance superior solderability
- Max. Lead Soldering Temperature: 210 °C 3/8" from case for 10 sec at 5 lbs tension
- Mounting Position: Any
- Polarity: Diode symbol or cathode band on case
- Weight: 0.09 Ounces (2.5 Grams), appox.

### MECHANICAL SPECIFICATION



*Die Size:  
0.180" x 0.180"  
Square*



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
E	1.27	1.35	0.050	0.053
F	4.19	4.45	0.165	0.175
L	25.15	25.65	0.990	1.010
M	5° NOM		5° NOM	

RoHS COMPLIANT

### 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		MR2535L	
Maximum Recurrent Peak Reverse Voltage	VRRM	23	VOLTS
Working Peak Reverse Voltage	VRWM		
Maximum DC Blocking Voltage	VDC		
Breakdown Voltage (IR = 100 mA DC, Tc = 25 °C)	V(BR)	24 Min / 32 Max	
Average Forward Rectified Current	IO	25	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	IFSM	600	
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle $\leq 1.0\%$ , Tc = 25 °C)	IRSM	110	
Instantaneous Forward Voltage (IF = 100A @ 300 $\mu$ Sec pulse, Duty Cycle $\leq 2\%$ , Tc = 25 °C)	VF	1.05 1.00	VOLTS
Maximum DC Reverse Current (VR = 20V DC, Tc = 25 °C)	IR	200	nA
Thermal Resistance, Junction to Lead (Note 1)	R $\theta$ JL	Note 2	°C/W
Thermal Resistance, Junction to Case (Note 1)	R $\theta$ JC	0.8	
Junction Operating & Storage Temperature Range	TJ, TSTG	-65 to +175	°C

Notes: 1) Both Leads to Heat Sink, Equal Length

Data Sheet No. MR2535L-1A

2) °C/W Max: 7.5 (Lead Length=1/4"); 10 (Lead Length=3/8"); 13 (Lead Length=1/2")