

DIOTEC ELECTRONICS CORP  
 18020 Hobart Blvd., Unit B  
 Gardena, CA 90248 U.S.A  
 Tel.: (310) 767-1052 Fax: (310) 767-7958

Looking For: MR2520L, MR2525,  
 MR2535L Replacements?

## 25 AMP OVERVOLTAGE TRANSIENT SUPPRESSORS

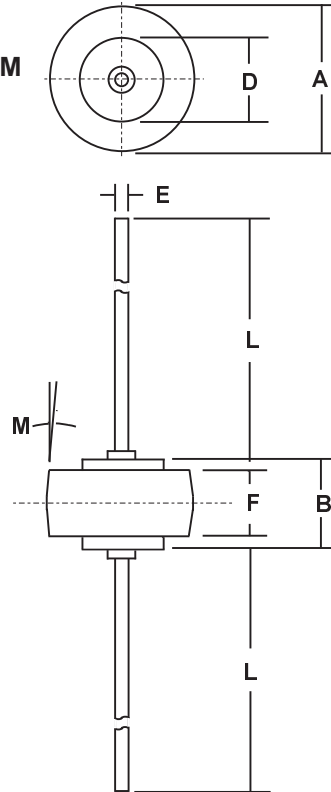
### FEATURES

- SUGGESTED REPLACEMENT FOR MR2520L, MR2525L, MR2535L
- 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	1.35	0.050	0.053
E	1.27	5.71	0.215	0.225
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		DR2535L	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	23	VOLTS
Working Peak Reverse Voltage	V <sub>RWM</sub>		
Maximum DC Blocking Voltage	V <sub>DC</sub>		
Breakdown Voltage (I <sub>R</sub> = 100 mA DC, T <sub>c</sub> = 25 °C)	V <sub>(BR)</sub>	24 Min / 32 Max	
Average Forward Rectified Current	I <sub>O</sub>	25	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	I <sub>FSM</sub>	600	
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle $\leq 1.0\%$ , T <sub>c</sub> = 25 °C)	I <sub>RSM</sub>	110	
Instantaneous Forward Voltage (I <sub>F</sub> = 100A @ 300 $\mu$ Sec pulse, Duty Cycle $\leq 2\%$ , T <sub>c</sub> = 25 °C)	V <sub>F</sub>	1.05 1.00	VOLTS
Maximum DC Reverse Current (V <sub>R</sub> = 20V DC, T <sub>c</sub> = 25 °C)	I <sub>R</sub>	200	nA
Thermal Resistance, Junction to Lead (Note 1)	R <sub>θJL</sub>	Note 2	°C/W
Thermal Resistance, Junction to Case (Note 1)	R <sub>θJC</sub>	0.8	
Junction Operating & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175	°C

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

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

Data Sheet No. DR2535L-1A