



**PLASTIC SILICON RECTIFIERS**

REVERSE VOLTAGE - **50 to 1000** Volts  
 FORWARD CURRENT - **1.5** Amperes

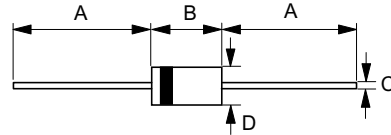
**FEATURES**

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

**MECHANICAL DATA**

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

**DO-41**



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 $\varnothing$	0.90 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
All Dimensions in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	V	
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Lengths @T <sub>L</sub> =70°C	I <sub>AV</sub>	1.5									A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I <sub>FSM</sub>	35									A	
Maximum forward Voltage at 1.5A DC	V <sub>F</sub>	1.1									V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0					50					uA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	15									pF	
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub>	50									°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150									°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C	

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 2.Thermal Resistance Junction to Lead .



RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

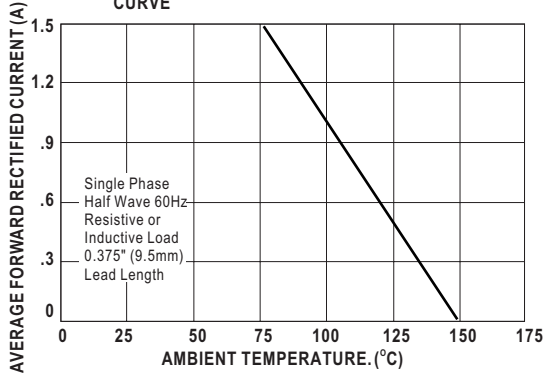


FIG.2- TYPICAL FORWARD CHARACTERISTICS

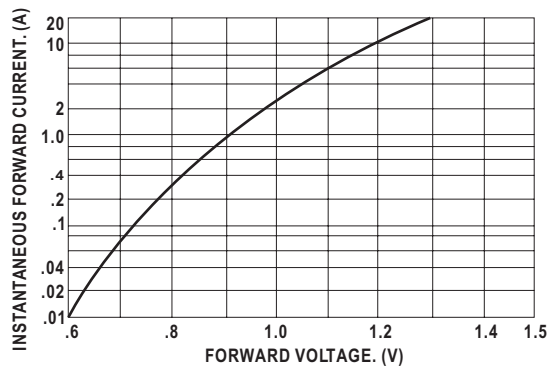


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

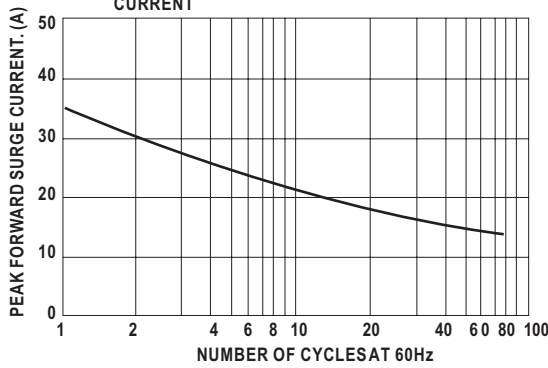


FIG.4- TYPICAL REVERSE CHARACTERISTICS

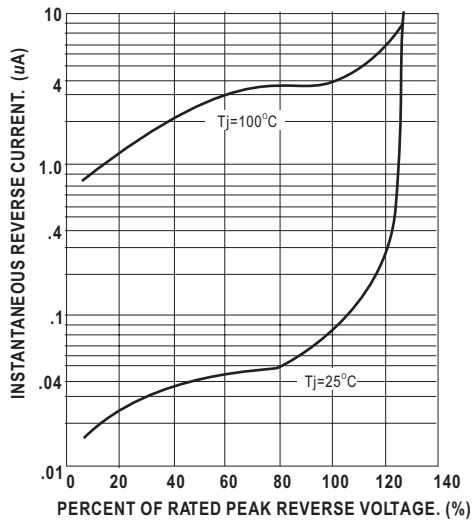


FIG.5- TYPICAL JUNCTION CAPACITANCE

