

### DO-15 PLASTIC SILICON RECTIFIERS

#### **FEATURES**

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- High voltage

## **MECHANICAL DATA**

- Case: DO-15 molded plastic body
- Mounting position: Any



#### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Paramenter		Symbol	R4000	R5000	Units
Maximum recurrent peak reverse voltage		V <sub>RRM</sub>	4000	5000	V
Maximum RMS voltage		V <sub>RMS</sub>	2800	3500	V
Maximum DC blocking voltage		V <sub>DC</sub>	4000	5000	V
Maximum Average Forward rectified Current at $T_A=50^{\circ}C$		F(AV)	0.2		А
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	30.0		A
Maximum Instantaneous Forward Voltage at 0.2A DC		V <sub>F</sub>	5.0		V
Maximum reverse current at rated DC blocking voltage	@T <sub>A</sub> =25 <sup>°</sup> C		5.0		
	@T <sub>A</sub> =100 <sup>°</sup> C		100.0		
Maximum Full Load Reverse Current Average, Full Cycle .375"(9.5mm) lead length at T∟=75°C		IR	30		μΑ
Typical Junction Capacitance (Note1)		C	30		pF
Typical Thermal Resistance (Note 2)		R $\theta$ JA	40		
Storage Temperature		T <sub>STG</sub>	- 55 +150		°C
Operation Junction Temperature		Tj	- 55 +125		°C

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient.375" (9.5mm) lead length.



## **RATINGS AND CHARACTERISTIC CURVES**



# FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS

