



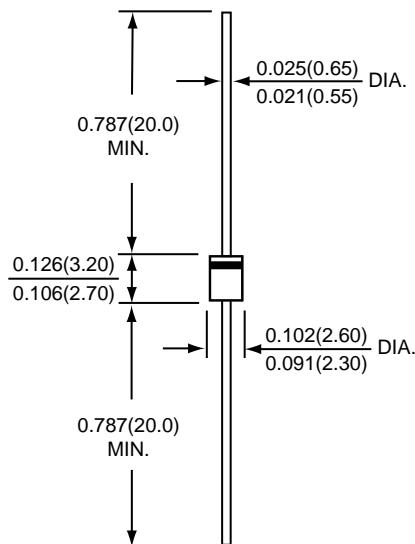
# 1A1 THRU 1A7

## SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0 Ampere

R-1



\*Dimensions in inches and (millimeters)



### FEATURES

- \* High reliability
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

### MECHANICAL DATA

**Case :** JEDEC R-1 molded plastic  
**Epoxy :** UL 94V-O rate flame retardant  
**Lead :** MIL-STD-202F method 208C guaranteed  
**Mounting Position :** Any  
**Weight :** 0.19 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.	SYMBOLS	1A1	1A2	1A3	1A4	1A5	1A6	1A7	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at TA=25°C	I (AV)	1.0						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25						Amps	
Maximum instantaneous forward voltage at 1.0 A	VF	1.1						Volts	
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	IR	5 50						uA	
Maximum full load reverse current, full cycle average , 0.375" (9.5mm) lead lengths at TL=75°C	IR (AV)	100						Amps	
Typical junction capacitance (NOTE )	CJ	15						pF	
Typical thermal resistance	R <sub>θJA</sub>	60						°C / W	
Operating junction and storage temperature range	T <sub>J,TSTG</sub>	-65 to +150						°C	

NOTES : Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

# RATINGS AND CHARACTERISTIC CURVES 1A1 THRU 1A7

FIG.1 - FORWARD CURRENT DERATING CURVE

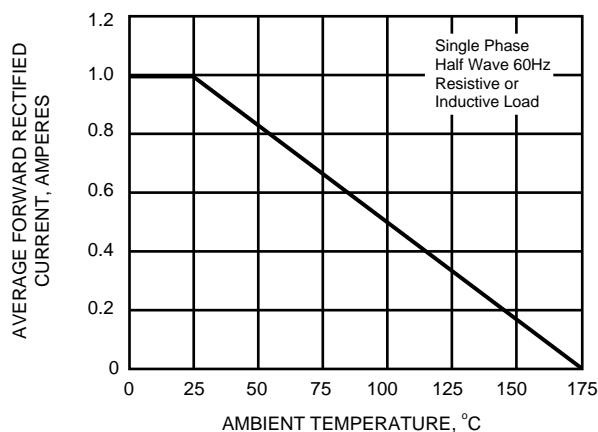


FIG.2 - MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE CURRENT

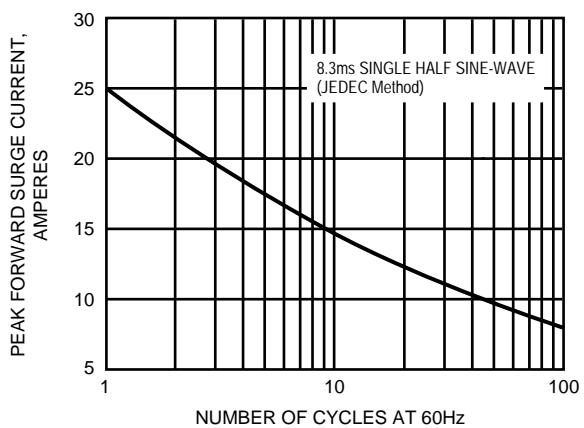


FIG.3 - TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

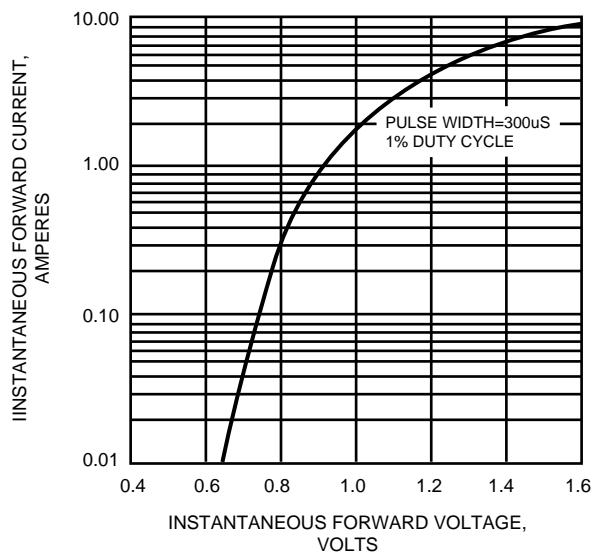


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

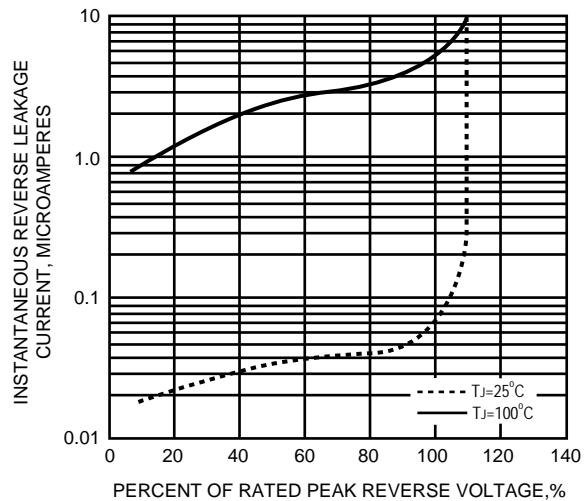


FIG.5 - TYPICAL JUNCTION CAPACITANCE

