Microsemi LAWRENCE

TECHNICAL DATA

POWER SILICON RECTIFIER

Qualified per MIL-PRF-19500/162

Devices	*Qualified Level*
1N1614 **1N1614R**	**JAN** **JANTX**

MAXIMUM RATINGS

Ratings		Symbol	1N1614, R	Unit
Working Peak Reverse Voltage		V_{RWM}	200	Vpk
Average Forward Current	T_C = +25^{0}C (1) T_C = +150^{0}C	I_O	10 5	Adc
Forward Current		I_F	15	Adc
Forward Current Surge Peak	T_C = +150^{0}C	I_{FSM}	100	A
Operating & Storage Junction Temperature Range		T_J, T_{stg}	-65 to +175	^{0}C

1) Derate linearly 40 mA/^{0}C above T_C = +25^{0}C

DO-4

*See appendix A for package outline

ELECTRICAL CHARACTERISTICS (T_A = +25^{0}C ±3^{0}C unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
Forward Voltage $t_p \leq$ 8.3 ms, duty cycle ≤ 2.0% pulsed; I_F = 15 A (pk)	V_F		1.5	Vpk
Reverse Current Leakage V_R = Rated V_{RWM}	I_R		50	µAdc
Thermal Impedance I_M =50 to 250 mA; I_H = 3 to 10 Adc; ^{t}H = 150 to 400 ms; ^{t}MD = 50 to 300 µs max	$Z_{ØJX}$		4.5	^{0}C/W