

POWER SILICON RECTIFIER

Qualified per MIL-PRF-19500/162

Devices

1N1614
1N1614R

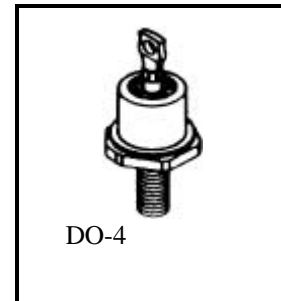
Qualified Level

JAN
JANTX

MAXIMUM RATINGS

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

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



*See appendix A for package outline

ELECTRICAL CHARACTERISTICS ($T_A = +25^{\circ}C \pm 3^{\circ}C$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
Forward Voltage $t_p \leq 8.3$ ms, duty cycle $\leq 2.0\%$ pulsed; $I_F = 15$ A (pk)	V_F		1.5	Vpk
Reverse Current Leakage $V_R =$ Rated V_{RWM}	I_R		50	μ Adc
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 μ s max	$Z_{\theta JX}$		4.5	$^{\circ}C/W$