

# ERC04-02 ~ ERC04-10

# SILICON RECTIFIER DIODES

**PRV : 200 - 1000 Volts**

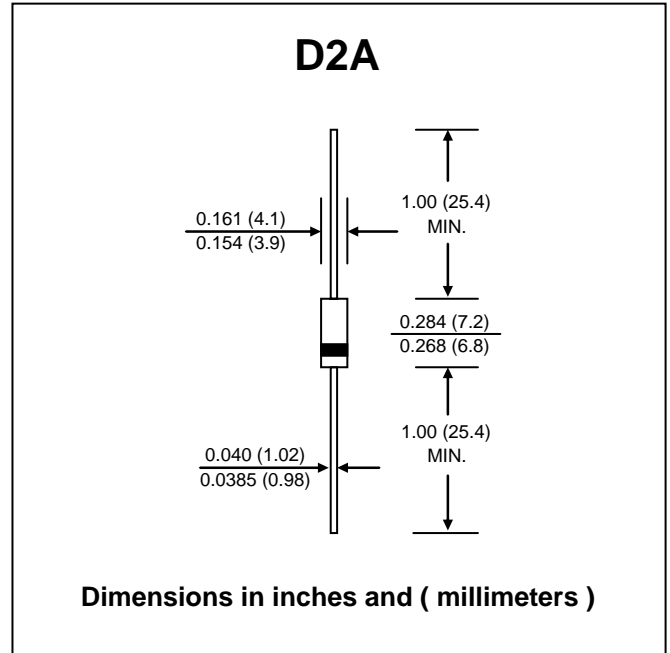
**Io : 1.2 Amperes**

### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : D2A Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.645 gram



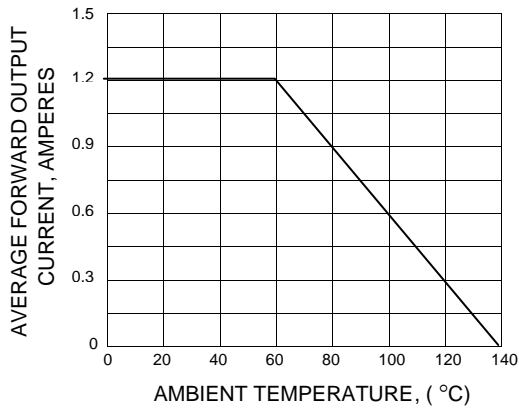
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified  
 Single phase, half wave, 50 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

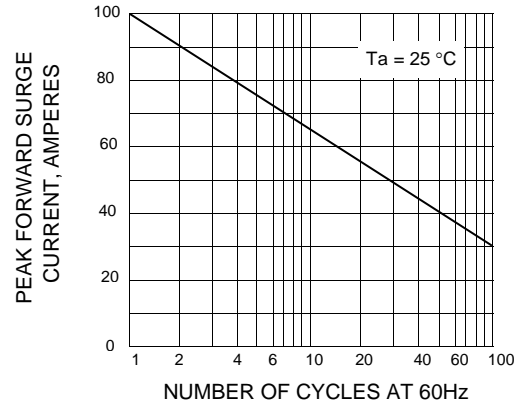
RATING	SYMBOL	ERC04-02	ERC04-04	ERC04-06	ERC04-10	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	1000	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	160	320	480	800	V
Maximum Average Forward Current , Ta = 60 °C	$I_{F(AV)}$	1.2				A
Maximum Non-repetitive Peak Forward Surge Current (sine wave 10ms at no load)	$I_{FSM}$	100				A
Maximum Forward Voltage at $I_F = 4.0 A$	$V_F$	1.1				V
Maximum Reverse Current at $V_{RRM}$	$I_{RRM}$	10				$\mu A$
Junction Temperature Range	$T_J$	- 40 to + 140				°C
Storage Temperature Range	$T_{STG}$	- 40 to + 140				°C

**RATING AND CHARACTERISTIC CURVES (ERC04-02 to ERC04-10)**

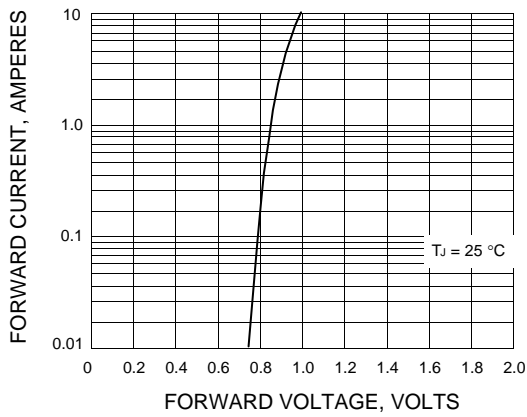
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

