

### ULTRA Fast Recovery High Voltage Rectifiers

 Lead(Pb)-Free

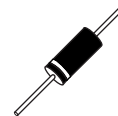
#### Features:

- \*ULTRA Fast Recovery Time
- \*UL94V-0 Flame Retardant Epoxy Molding Compound
- \*High Voltage ( $\geq 2000$  V )
- \*Low Leakage Current

#### Mechanical Data:

- \*Case: Transfer Molded
- \*Lead: Solderable per MIL-STD-202, Method 208
- \*Polarity: Cathode Indicate by Color Band
- \*Weight: 0.34 grams

**HIGH VOLTAGE  
RECTIFIERS  
0.2 AMPERES  
2000 VOLTS**

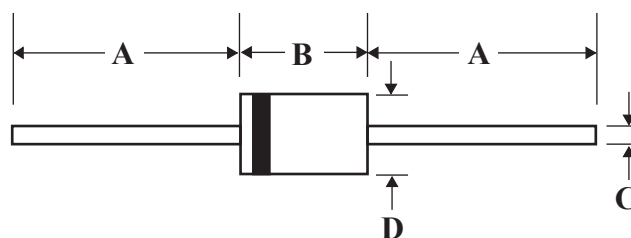


**DO-41**

### DO-41 Outline Dimensions

Unit:mm

**Axial Device (Through-Hole)**



Dim	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
DO-41	25.40	-	4.06	5.02	0.70	0.90	2.00	2.70

## Maximum Rating

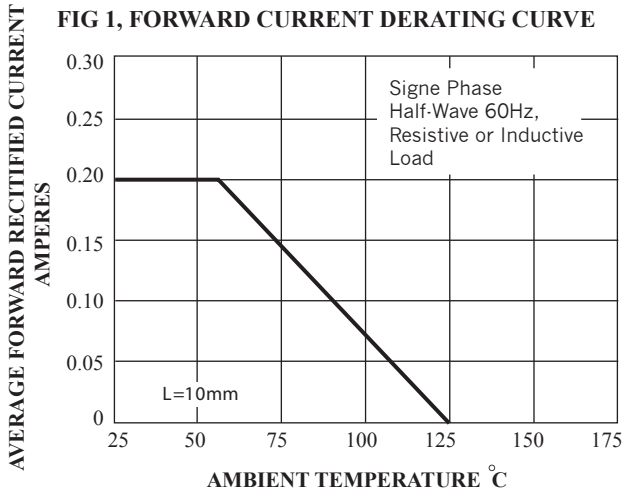
Rating 25°C Ambient Temperature Unless Otherwise Specified Single Phase Half Wave, 60Hz, Resistive or Inductive Load for Capacitive Load, Derate Current by 20%

Characteristic	Symbol	H0220	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	2000	V
RMS Reverse Voltage	$V_{R(RMS)}$	1400	V
Average Rectifier Forward Current (L=10mm, $T_A=55^\circ\text{C}$ )	$I_{F(AV)}$	0.2	A
Non-Repetitive Peak Square Current Surge Applied at Rated Load Condition Halfwave, Single Phase, 60Hz (JEDEC Method)	$I_{FSM}$	25	A
Storage Temperature Range	$T_{STG}$	-65 to +150	°C
Operating Temperature Rang	$T_j$	-65 to +125	°C

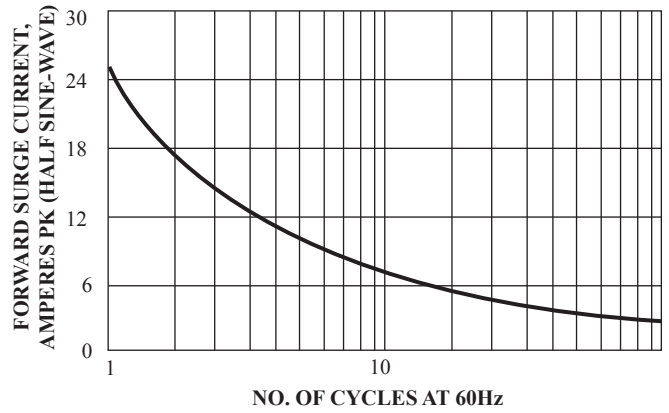
## Electrical Characteristic (TA=25°C Unless Otherwise Noted)

Characteristic	Symbol	MAX	UNIT
Maximum Instanatneous Forward Voltage ( $I_F=0.2$ Amp)	$V_F$	7.0	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_c=25^\circ\text{C}$ )	$I_R$	5.0	μA
Typical Reverse Recovery Time	$T_{rr}$	75	nS
Typical Junction Capacitance ( $V_R=4.0V$ , $f=1.0MHz$ )	$C_J$	150	$P_F$

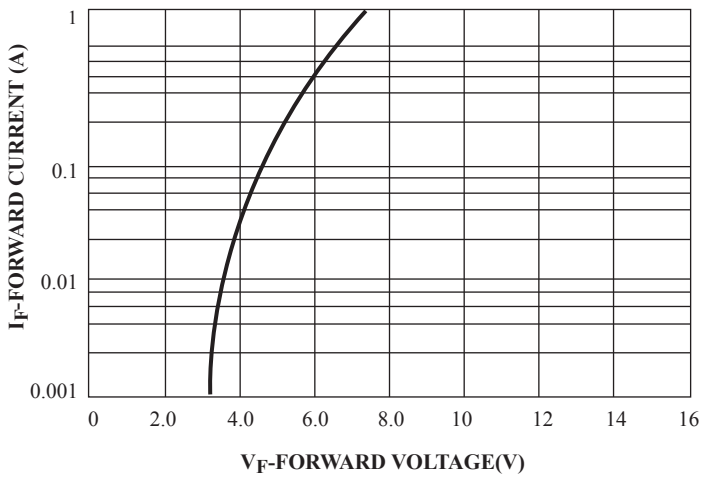
**FIG 1, FORWARD CURRENT DERATING CURVE**



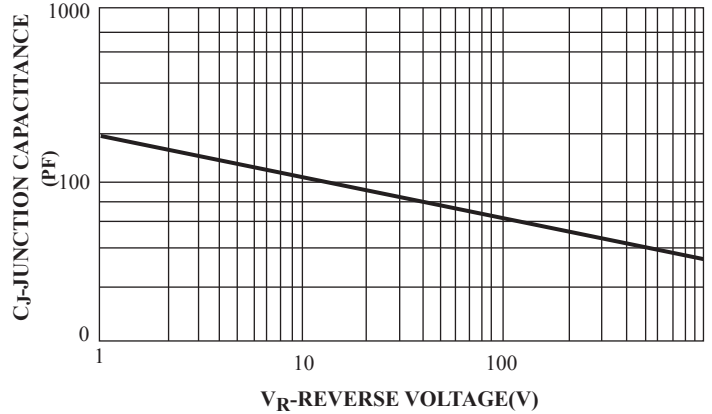
**FIG 2, MAXIMUM FORWARD SURGE VS NUMBER OF CYCLES**



**FIG 3, TYPICAL FORWARD CHARACTERISTICS**



**FIG 4, TYPICAL JUNCTION CAPACITANCE**



**FIG 5, TYPICAL REVERSE CHARACTERISTICS AT T<sub>J</sub>=25°C**

