

ULTRA Fast Recovery High Voltage Rectifiers

 Lead(Pb)-Free

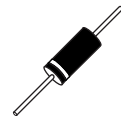
Features:

- *ULTRA Fast Recovery Time
- *UL94V-O Flame Retardant Epoxy Molding Compound
- *High Voltage (≥ 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**

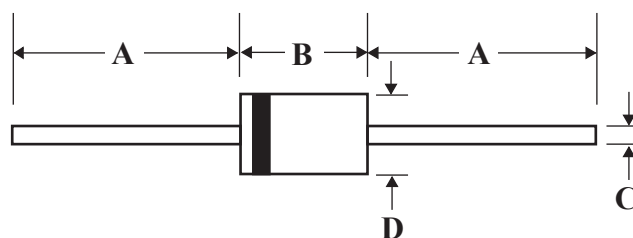


DO-41

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 ($L=10\text{mm}$, $T_A=55^\circ\text{C}$)	$I_{F(AV)}$	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 ($I_F=0.2\text{ Amp}$)	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 ($V_R=4.0\text{V}$, $f=1.0\text{MHz}$)	C_J	150	P_F

FIG 1, FORWARD CURRENT DERATING CURVE

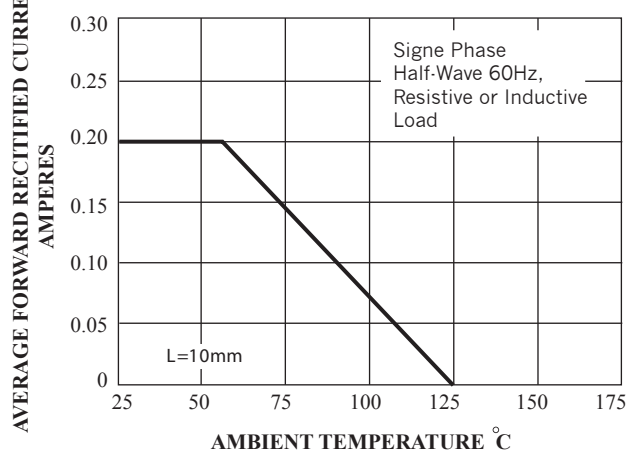


FIG 2, MAXIMUM FORWARD SURGE VS NUMBER OF CYCLES

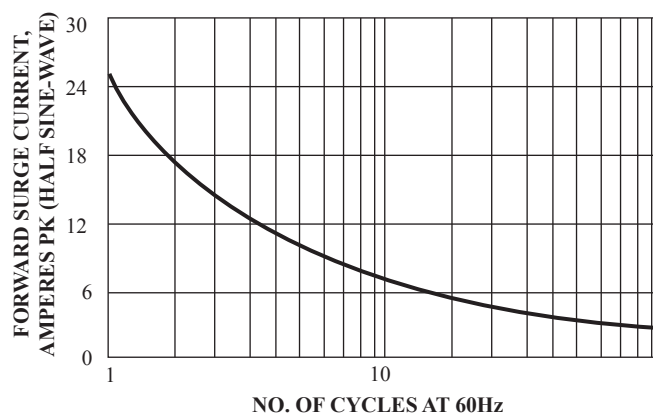


FIG 3, TYPICAL FORWARD CHARACTERISTICS

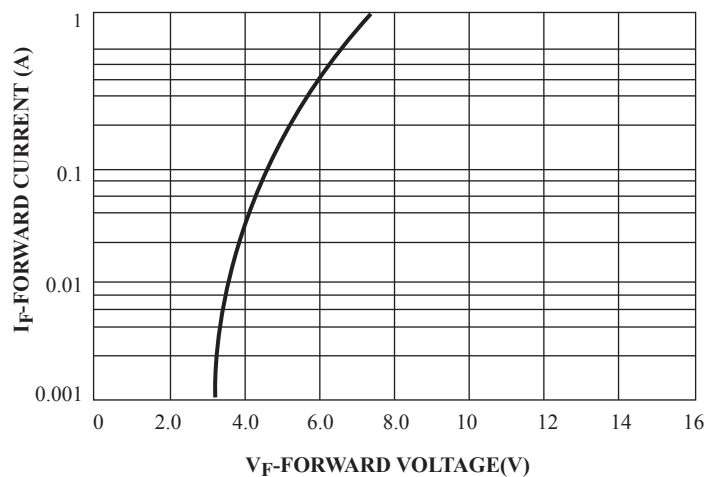
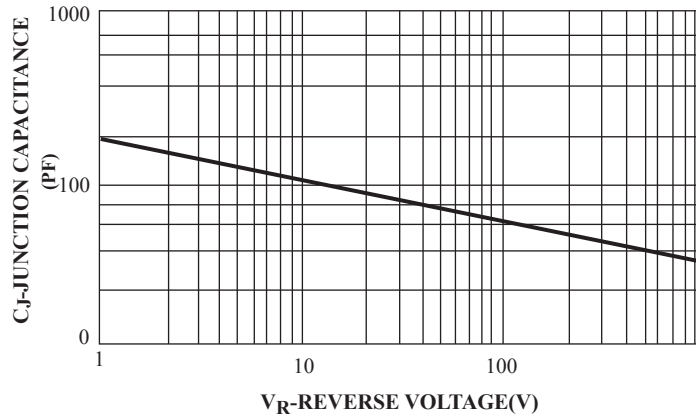


FIG 4, TYPICAL JUNCTION CAPACITANCE

FIR 5, TYPICAL REVERSE CHARACTERISTICS
AT TJ=25°C