

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free junctions
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

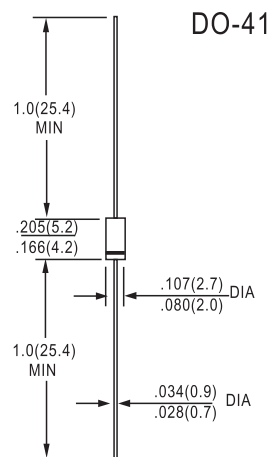
Case: JEDEC DO-204AL molded plastic over glass body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GP02 -20	GP02 -25	GP02 -30	GP02 -35	GP02 -40	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	2000	2500	3000	3500	4000	Volts
Maximum RMS Voltage	V_{RMS}	1400	1750	2100	2450	2800	Volts
Maximum DC blocking voltage	V_{DC}	2000	2500	3000	3500	4000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	0.25					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load at: (JEDEC Method) $T_A=55^\circ\text{C}$	I_{FSM}	15.0					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	3.0					Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0					μA
Typical reverse recovery time (NOTE 1)	t_{rr}	2.0					μs
Typical junction capacitance (NOTE 2)	C_J	3.0					pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	130.0					$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^\circ\text{C}$

NOTES:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

GP02-20 THRU GP02-40

FIG. 1 - FORWARD CURRENT DERATING

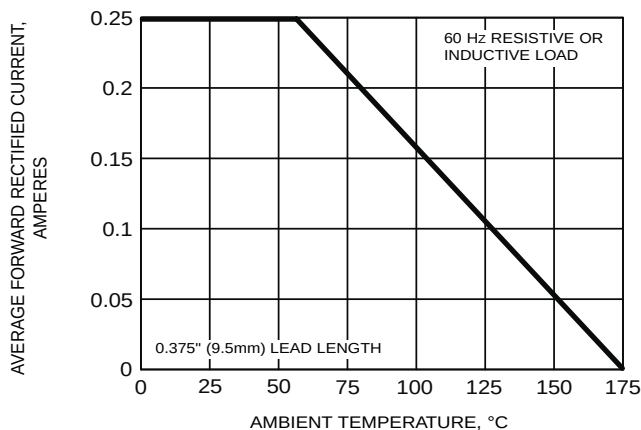


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

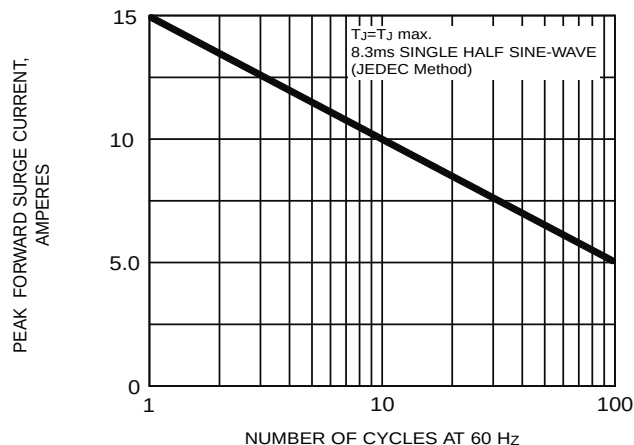


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

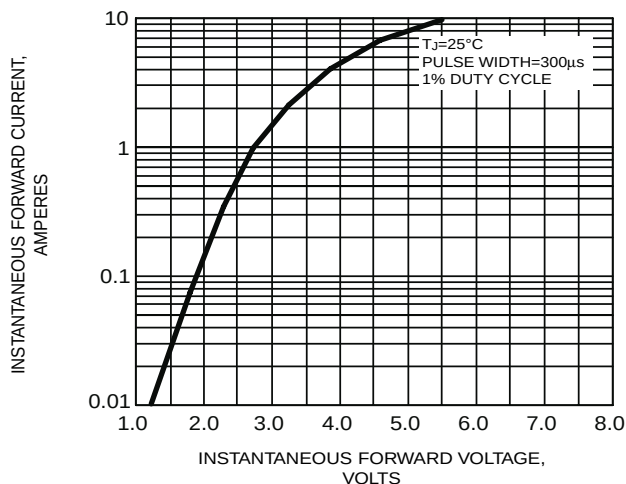


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

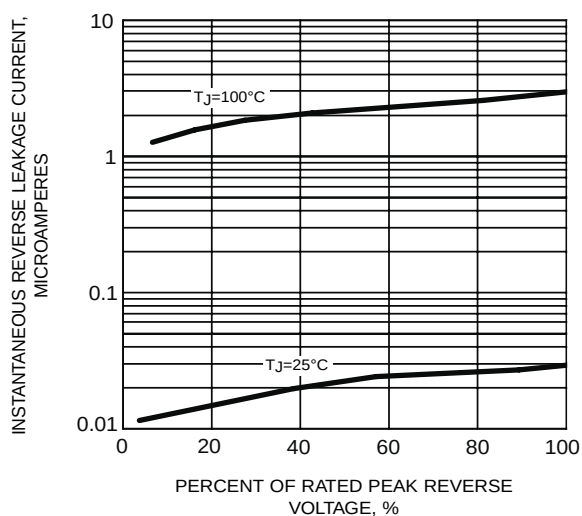


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

