



FAST RECOVERY GLASS PASSIVATED RECTIFIERS

BY296G THRU BY299G

VOLTAGE RANGE
CURRENT

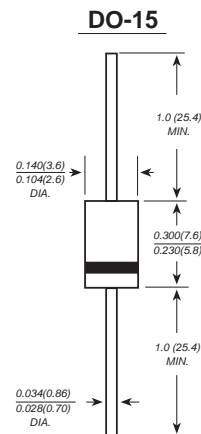
100 to 800 Volts
2.0 Ampere

FEATURES

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case : JEDEC DO-15 molded plastic body
- Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.014 ounce, 0.40 grams



Dimensions in inches and (millimeters)

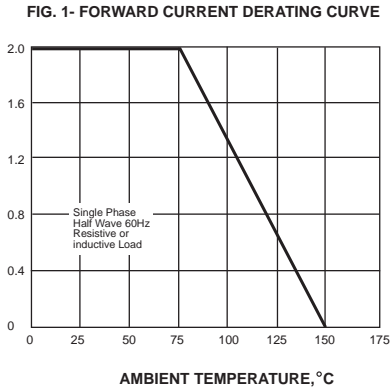
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

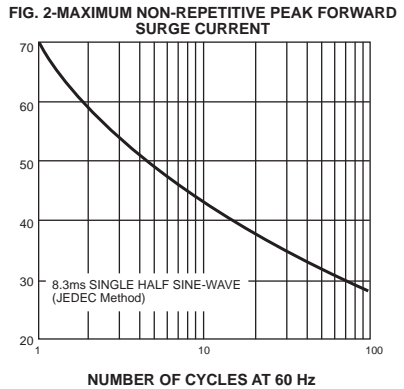
	SYMBOLS	BY296G	BY297G	BY298G	BY299G	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	800	VOLTS
Maximum RMS voltage	V_{RMS}	70	140	280	560	VOLTS
Maximum DC blocking voltage	V_{DC}	100	200	400	800	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	I_{AV}	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	70.0				Amps
Maximum instantaneous forward voltage at 2.0A	V_F	1.3				Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 100.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	500				ns
Typical junction capacitance (NOTE 2)	C_J	40.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	40.0				$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

- Note:** 1. Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

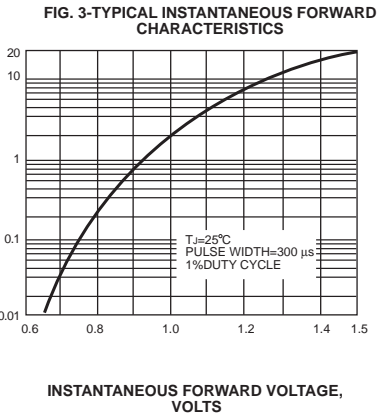
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



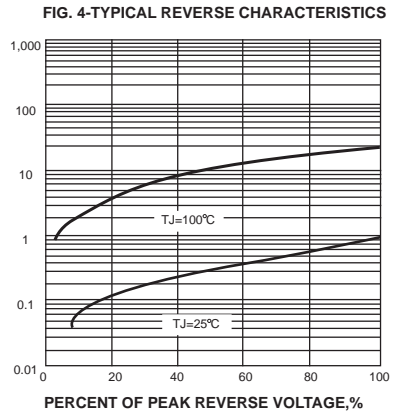
PEAK FORWARD SURGE CURRENT, AMPERES



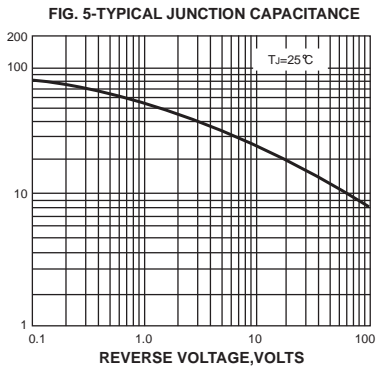
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

