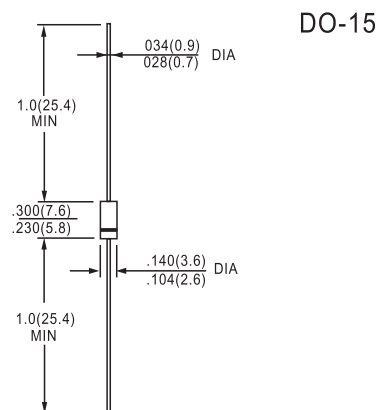


FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency

MECHANICAL DATA :

- * Case : DO-201AD 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 : 1.16 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	BY296	BY297	BY298	BY299	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	400	800	V
Maximum RMS Voltage	V _{RMS}	70	140	280	560	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 50 °C	I _{F(AV)}	2.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	70				A
Maximum Peak Forward Voltage at I _F = 2.0 Amps.	V _F	1.3				V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	I _R	10				μA
	I _{R(H)}	500				μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	250				ns
Typical Junction Capacitance (Note 2)	C _J	28				pf
Junction Temperature Range	T _J	- 50 to + 125				°C
Storage Temperature Range	T _{STG}	- 50 to + 150				°C

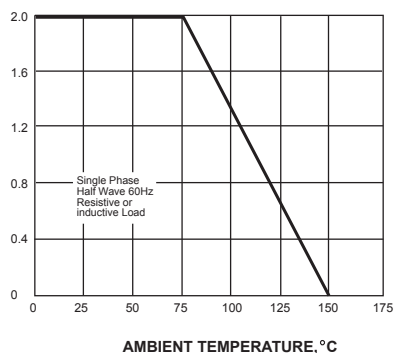
Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

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

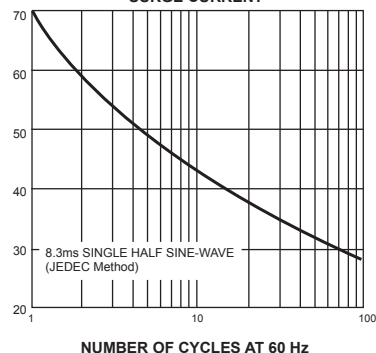
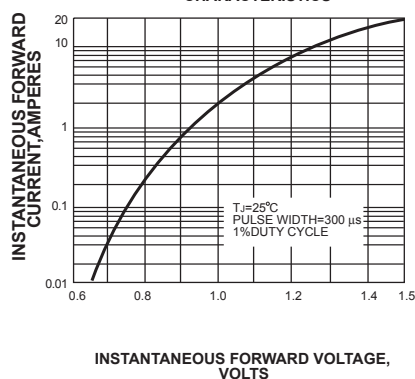


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

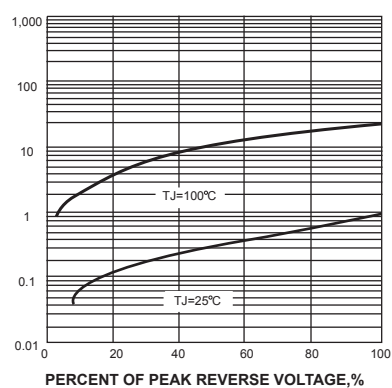
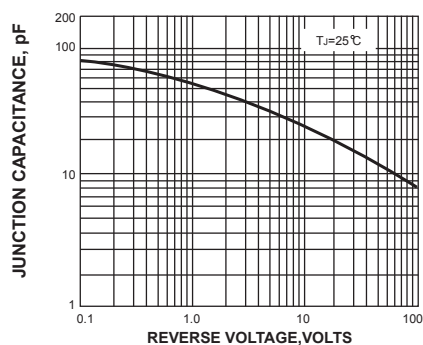


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

