TAYCHIPST

GLASS PASSIVATED GENERAL PURPOSE RECTIFIERS

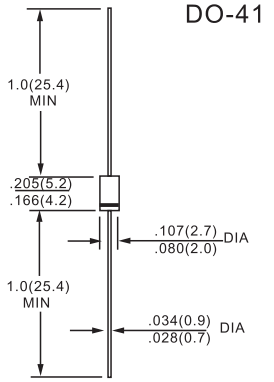
1N4001G-1N4007G,BY133G
50V-1000V
1.0A

FEATURES :

* Glass passivated chip
* High current capability
* High reliability
* Low reverse current
* Low forward voltage drop

MECHANICAL DATA :

* Case : DO-41 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 : 0.339 gram



Dimensions in inches and (millimeters)

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	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	BY 133G	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1300	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	910	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1300	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 75 °C	$I_{F(AV)}$	1.0								Amp.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30								Amps.
Maximum Forward Voltage at I_F = 1.0 Amp.	V_F	1.0								Volts
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0								µA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50								µA
Typical Junction Capacitance (Note1)	C_J	8								pF
Typical Thermal Resistance (Note2)	RθJA	45								°C/W
Junction Temperature Range	T_J	- 65 to + 175								°C
Storage Temperature Range	T_{STG}	- 65 to + 175								°C

Notes : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC
(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

FIG. 1 - FORWARD CURRENT DERATING CURVE

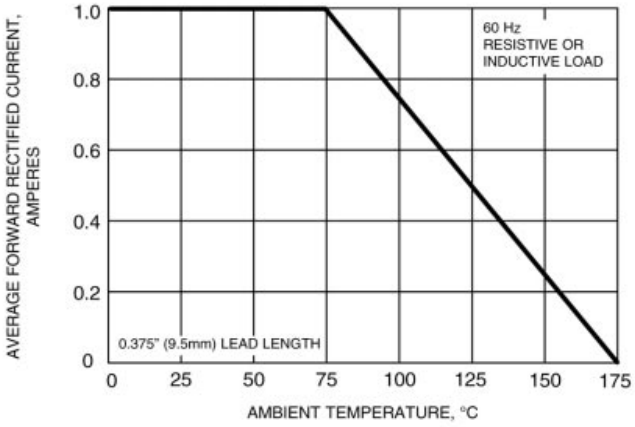


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

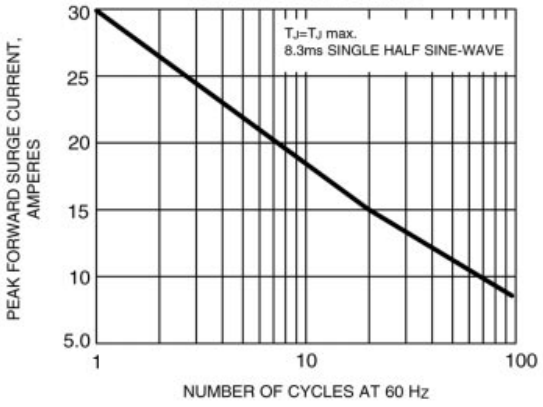


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

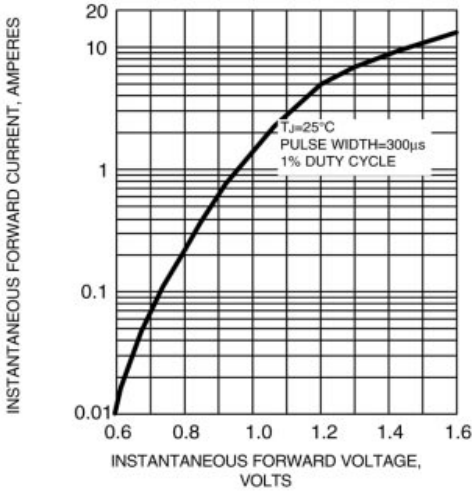


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

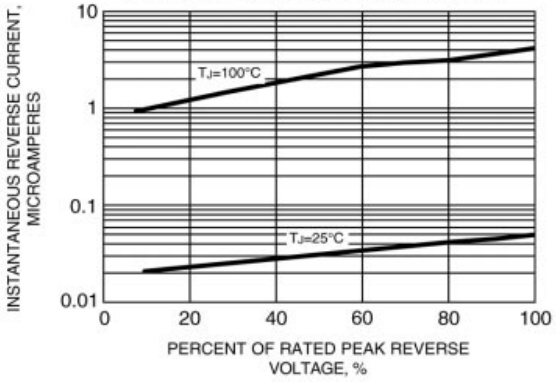


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

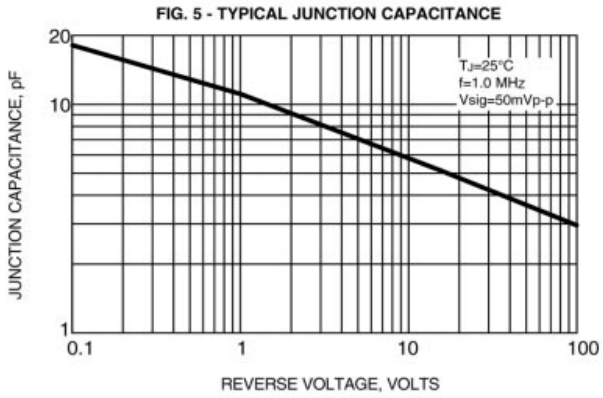


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE