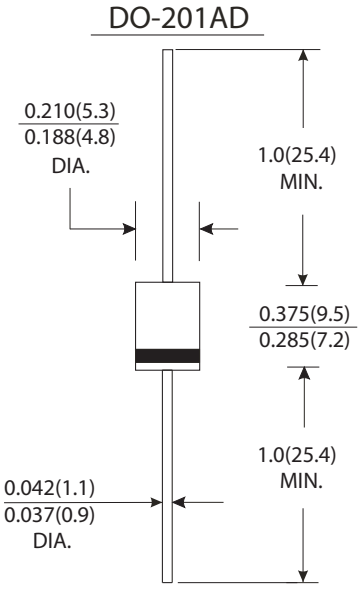
DEC

BY251 THRU BY255

CURRENT 3.0 Amperes
VOLTAGE 200 to 1300 Volts

Features

- Low cost
- Diffused junction
- High current capability
- The plastic material carries U/L recognition 94V-0



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC DO-201AD molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.042 ounce, 1.1 grams

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	BY251	BY252	BY253	BY254	BY255	Units
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	1000	Volts
Maximum average forward rectified current at T_A=50℃	$I_{(AV)}$	3.0					Amps
Recurrent peak Forward Current	I_{FRM}	20.0					Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load	I_{FSM}	100.0					Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.1					Volts
Maximum reverse current at rated DC blocking voltage	I_R	10.0					μA
Typical thermal resistance	$R\Theta_{JA}$	30.0					℃/W
Typical junction capacitance (Note 1)	C_J	30.0					pF
Operating and storage temperature range	T_J T_{STG}	-50 to +150					℃

Notes:
(1) Measured at 1MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES BY251 THRU BY255

FIG.1-FORWARD CURRENT DERATING CURVE

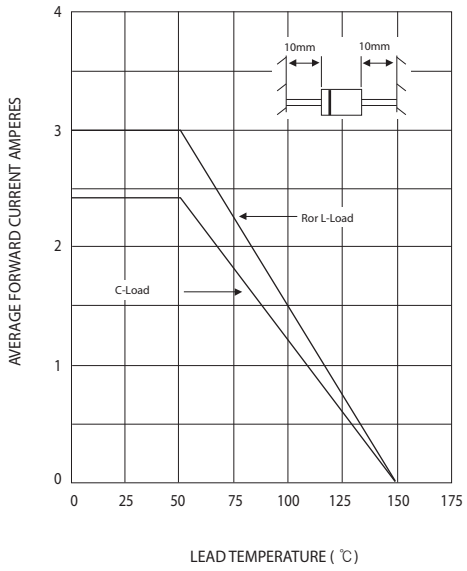


FIG.2-TYPICAL FORWARD CHARACTERISTICS

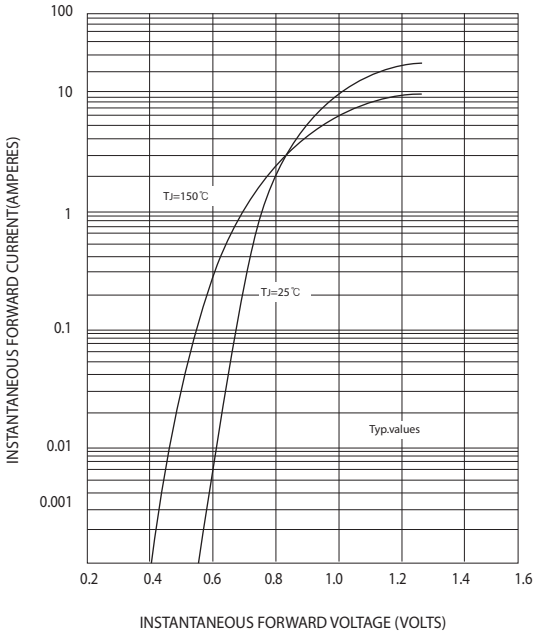


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

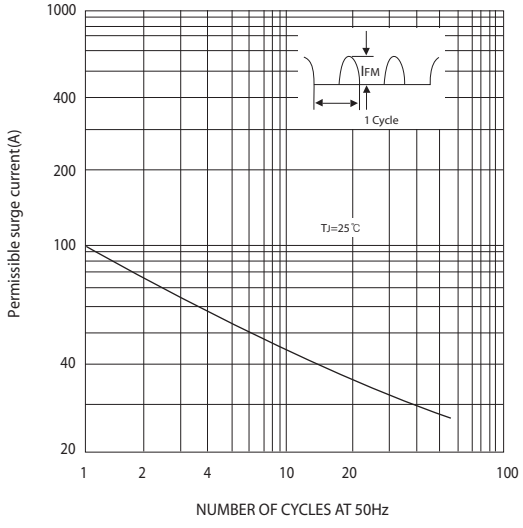


FIG.4-TYPICAL THERMAL RESISTANCE