BY251 thru BY255

MEDIUM CURRENT PLASTIC RECTIFIER

CHENG-YI ELECTRONIC

VOLTAGE RANGE-200 TO 1300 Volts
CURRENT -3.0 Amperes

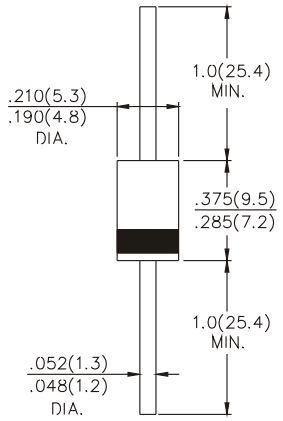
FEATURE

- High surge current capability
- Plastic package has underwriters laboratory Flammability classification 94V-O
- Low leakage
- Void-free molded in DO-201AD plastic package
- High current operation of 3 Amperse at TA=95°C with no thermal runaway
- Exceeds enviromental standard of MIL-STD-19500/228

MECHANICAL DATA

- Case:JEDEC D0-201AD molded plastic
- Trminals:plated axials leads ,solderable per MIL-STD-750, Method 2026
- Polarity:Color band denotes cathode
- Weight:0.04 ounce, 1.1gram
- Mounting Position:Any

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

		BY251	BY252	BY253	BY254	BY255	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1300	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	910	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1300	V
Maximum Average Forward Rectified Current .375", (9.5mm) lead lengths at T_A=95°C	$I_{(AV)}$	3.0					A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100.0					A
Maximum Instantaneous Forward Voltage T_J =25°C at 3.0A T_J=100°C	V_F	1.1 1.0					V
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=100°C	I_R	5.0 500					μA
Typical Junction Capacitance (Note 2) T_J =25°C	C_J	28.0					pF
Typical Reverse Recovery Time (Note 3)	T_{RR}	2.5					μS
Typical Thermal Resistance (Note1)	$T\theta JA$	15.0					°C / W
Operating Junction Temperature Range	T_J	-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150					°C

Notes : 1. Thermal Resistance from Junction to applied at ambient .375" (9.5mm) lead lengths, P.C. Board mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Reverse Recovery Test Conditions : I_F=0.5A, I_R=1.0A, Irr=0.25A.

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RATING AND CHARACTERISTICS CURVES
BY251 THRU BY255

Fig.1 - FORWARD CURRENT DERATING CURVE

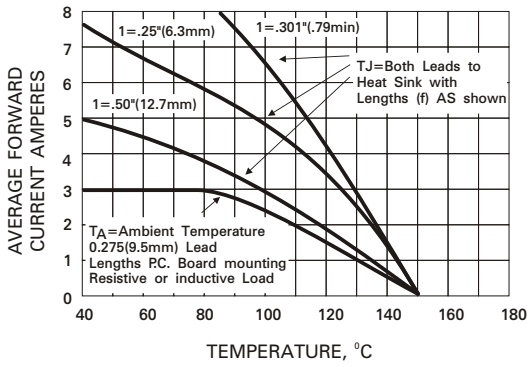

Fig.2 - MAXIMUM PEAK FORWARD SURGE CURRENT

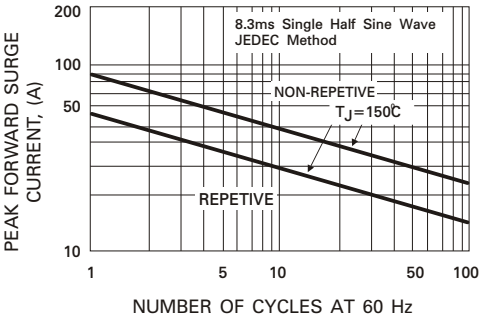

Fig.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

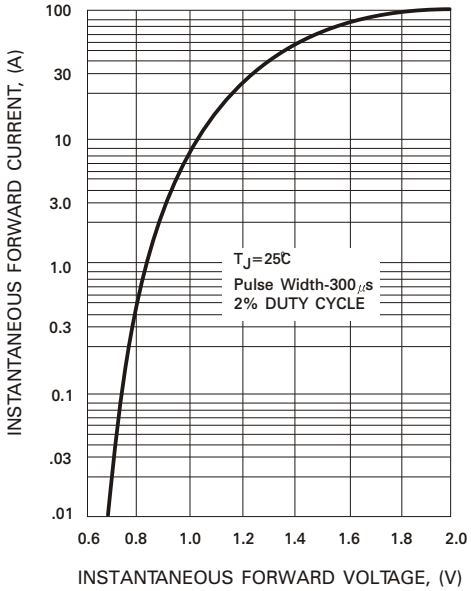

Fig.4 - TYPICAL JUNCTION CAPACITANCE

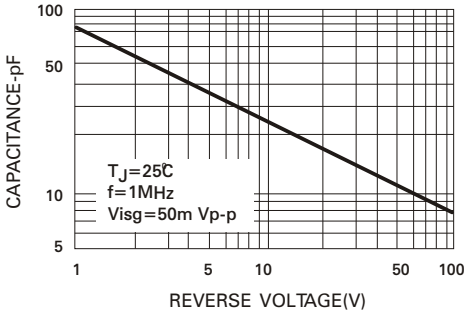

Fig.5 - TYPICAL REVERSE CHARACTERISTICS