DEC

STANDARD RECTIFIER

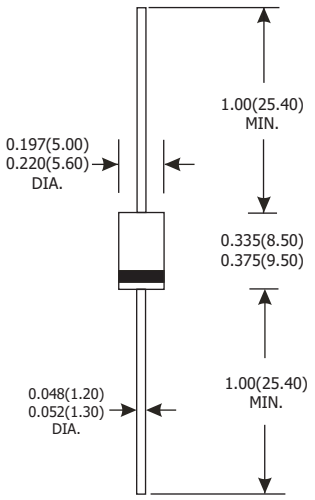
6A05 THRU 6A120

CURRENT 6.0 Ampere
VOLTAGE 50 to 1200 Volts

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Package : DO-201AD, Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

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%)

Items		Symbols	6A05	6A10	6A20	6A40	6A60	6A80	6A100	6A120	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	840	V
Average Rectified Output Current (1) at T_A=60℃		I_O	6.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	400								A
Forward Voltage at I_F=6.0A		V_{FM}	1.0								V
Peak Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_{RM}	5.0								μA
	T_A=100℃		1.0								mA
Typical Junction Capacitance (2)		C_J	150								pF
Typical Thermal Resistance Junction to Ambient (3)		$R_{\theta JA}$	20								℃/W
Typical Thermal Resistance Junction to Lead (3)		$R_{\theta JL}$	4.0								℃/W
Operating and Storage Temperature Range		T_J , T_{STG}	-50 to +150								℃

Notes:
(1) Leads maintained at ambient temperature at a distance of 9.5mm from the case.
(2) Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.
(3) Mounted on FR-4 PCB with 30mm x 30mm copper pad.

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RATINGS AND CHARACTERISTIC CURVES 6A05 THRU 6A120

FIG.1- FORWARD CURRENT DERATING CURVE

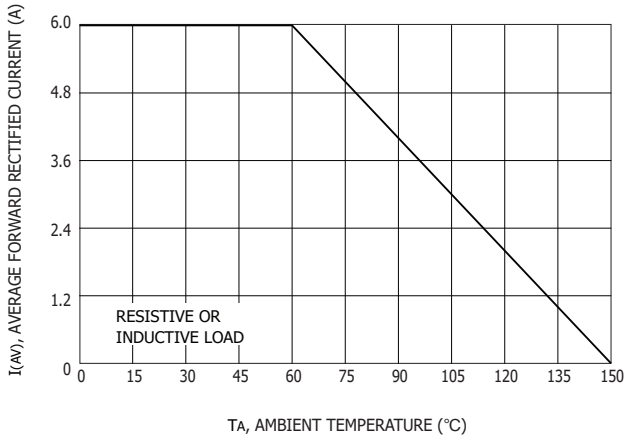

FIG.2- TYPICAL FORWARD CHARACTERISTICS

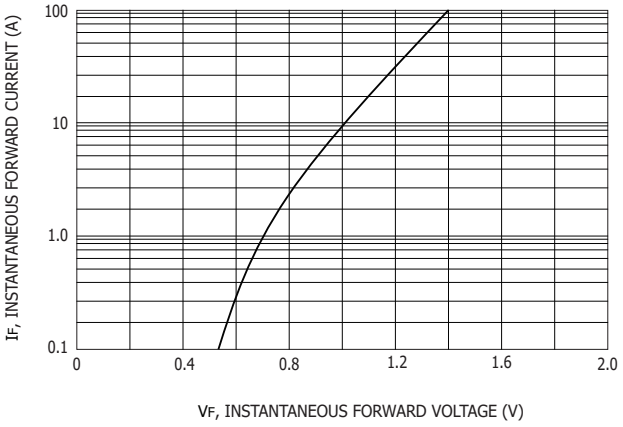

FIG.3- FORWARD SURGE CURRENT DERATING CURVE

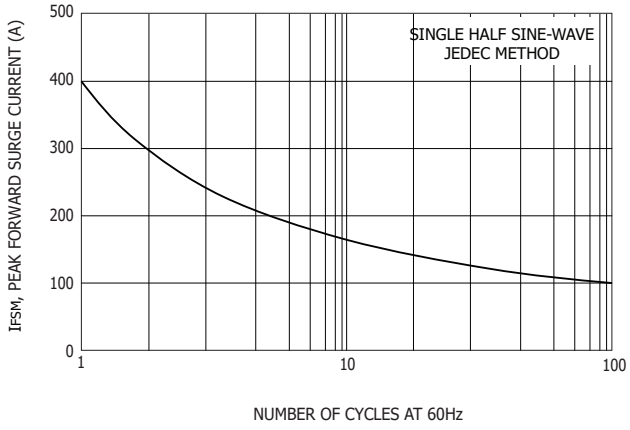

FIG.4-TYPICAL REVERSE CHARACTERISTICS

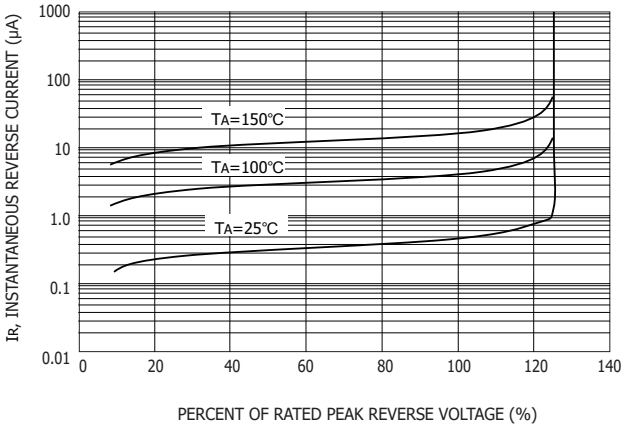

FIG.5- TYPICAL JUNCTION CAPACITANCE