

GENERAL PURPOSE SILICON RECTIFIER

6A05 - 6A10



R-6

Plastic Leaded Package

High Surge Current Capability

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at $T_A = 25^\circ\text{C}$ unless specified otherwise, single phase, half wave, 60Hz, resistive or inductive load.

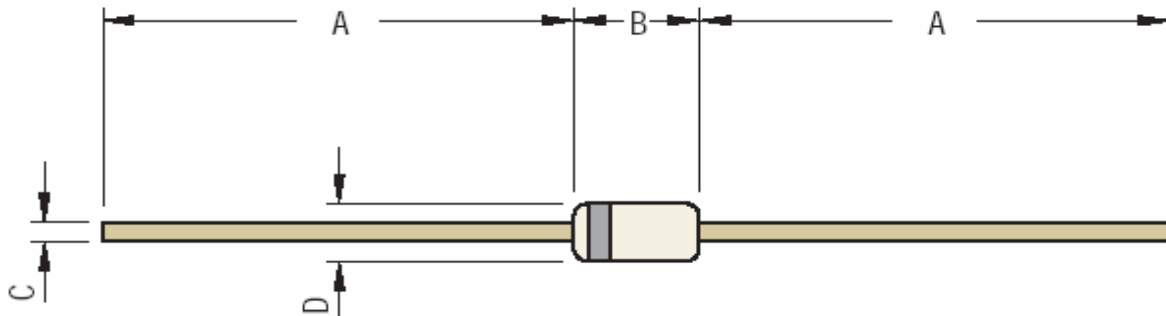
For capacitive load, derate current by 20%)

DESCRIPTION	SYMBOL	VALUE							UNIT
		6A05	6A1	6A2	6A4	6A6	6A8	6A10	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length at $T_A = 60^\circ\text{C}$	$I_{(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400.0							A
Maximum Forward Voltage @ 6.0A DC and 25°C	V_F	1.10							V
Maximum Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 125^\circ\text{C}$	I_R	10.0 1000							μA
Typical Junction Capacitance (Note1)	C_j	150							pF
Typical Thermal Resistance (Note2)	R_{QJA}	20.0							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 V_{DC}
2. Thermal Resistance junction to ambient and from junction to lead at 0.375" (9.5mm) lead length PCB mounted with 1.0x1.1" (30x30mm) Copper pads

R-6 Axial Lead Plastic Package



DIM	Min	Max
A	25.40	
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10

All Dimensions are in mm

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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