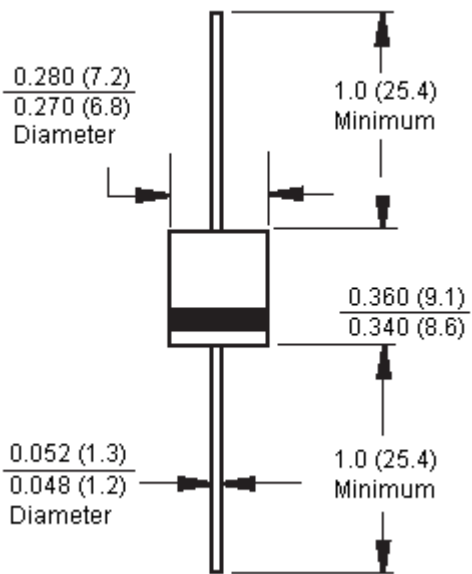




Features:

- High efficiency, Low V_F .
- High current capability.
- High reliability.
- High surge current capability.
- Low power loss.

R-6



Dimensions : Inches (Millimetres)

Mechanical Data:

Cases	: Moulded plastic.
Lead	: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed.
Polarity	: Colour band denotes cathode.
High temperature soldering guaranteed	: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths at 5lbs., (2.3kg) tension.
Weight	: 1.65 grams.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

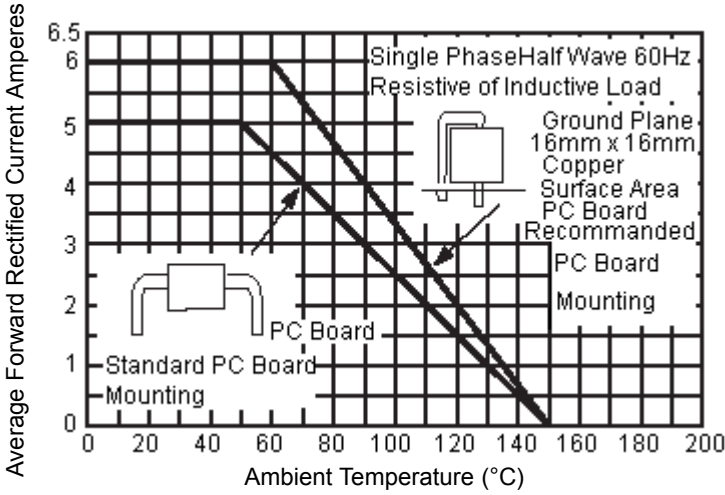
Type Number	Symbol	6A05	6A10	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	V
Maximum RMS Voltage	V_{RMS}	35	70	
Maximum DC Blocking Voltage	V_{DC}	50	100	
Maximum Average Forward Rectified Current 0.375 (9.5mm) Lead Length at $T_A = 60^\circ\text{C}$	$I_{(AV)}$	6.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	250		
Maximum Instantaneous Forward Voltage at 6.0A	V_F	0.95		v
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125^\circ\text{C}$	I_R	10	400	μA μA
Maximum Full Load Reverse Current, Full Cycle Average 0.375 inch (9.5mm) Lead Length at $T_A = 75^\circ\text{C}$	HT_{IR}	50		μA
Typical Junction Capacitance (Note 1)	C_j	90		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	35		$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-65 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}			

Notes: 1. Measured at 1MHz and Applied Reverse Voltage of 4.0V dc.

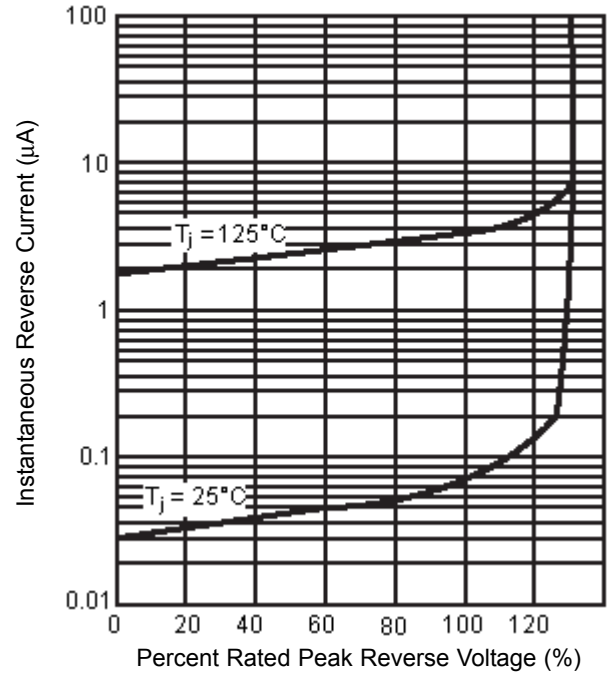
2. Mount on Cu-Pad Size 16mm x 16mm on PCB.

Ratings and Characteristic Curves (6A05 and 6A10)

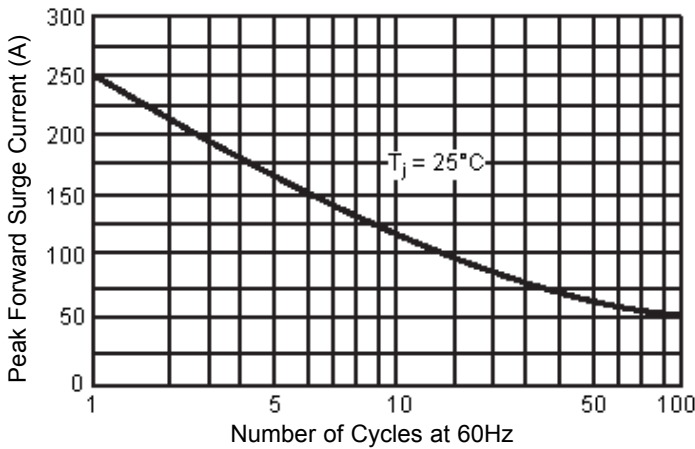
Maximum Forward Current Derating Curve



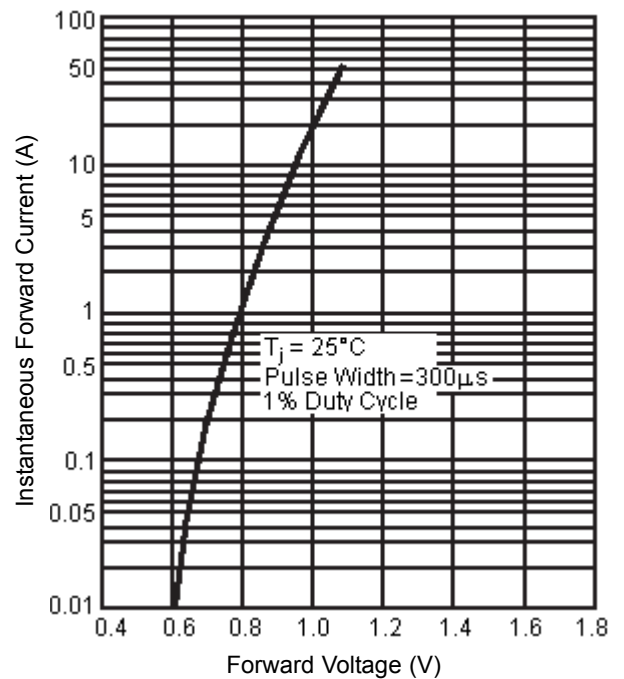
Typical Reverse Characteristics



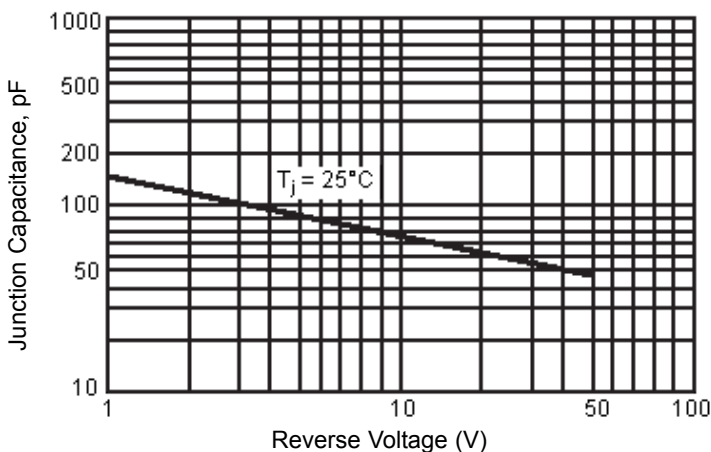
Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristics



Typical Junction Capacitance



6Ax Series



Part Number Table

Description	Part Number
Diode, Standard, 6A, 50V	6A05
Diode, Standard, 6A, 100V	6A10



Notes:

International Sales Offices:

	AUSTRALIA - Farnell Tel No: ++61 1300 361 005 Fax No: ++61 1300 361 225		FINLAND - Farnell Tel No: ++ 358 9 560 7780 Fax No: ++ 358 9 345 5411		ITALY - Farnell Tel No: ++ 39 02 93 995 200 Fax No: ++ 39 02 93 995 300		SPAIN - Farnell Tel No: 901 20 20 80 Fax No: 901 20 20 90
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