

### FEATURES

- ✧ Hyper fast recovery time
- ✧ Soft recovery characteristics
- ✧ Low forward voltage
- ✧ Low stored charge
- ✧ Low leakage current
- ✧ Low recovery loss
- ✧ High junction temperature
- ✧ Epitaxial planar construction

### MACHANICAL DATA

- ✧ Case: DO-201AD(DO-27) outline plastic package
- ✧ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ✧ Molding Compound Flammability Rating:UL94-0
- ✧ High temperature soldering guaranteed:  
260°C /10second

### ORDERING INFORMATION

- ✧ Device: HFD06G40Z
- ✧ Package: DO-201AD(DO-27)
- ✧ Marking: As marked
- ✧ Material: RoHS compliant
- ✧ Packing: Tape & Ammo
- ✧ Quantity per box: 1,250pcs

### APPLICATIONS

- ✧ Switching mode power supply
- ✧ Motor control
- ✧ Inverters, Converters
- ✧ Freewheeling, Snubber, PFC circuits
- ✧ Polarity protection

### SYMBOL



### PACKAGE OUTLINE



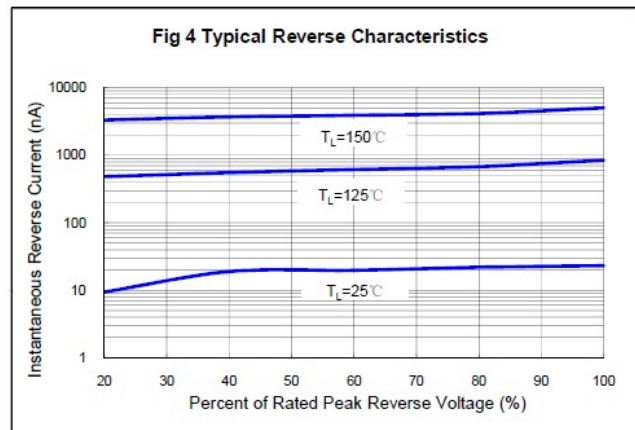
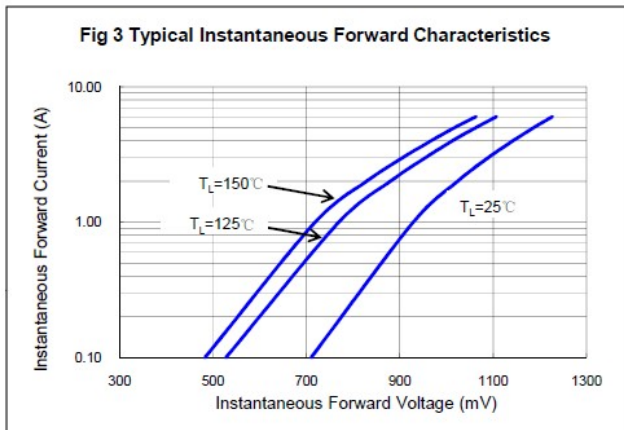
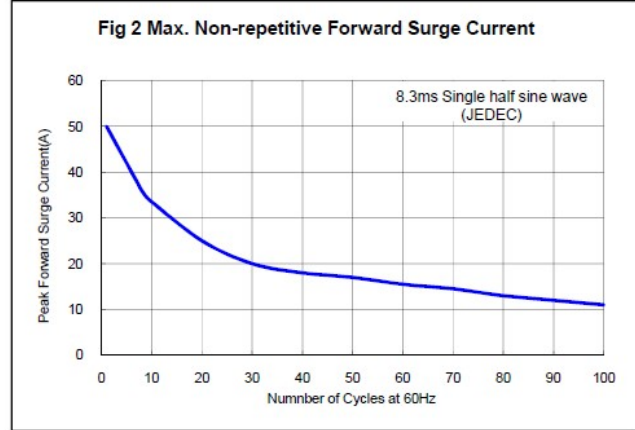
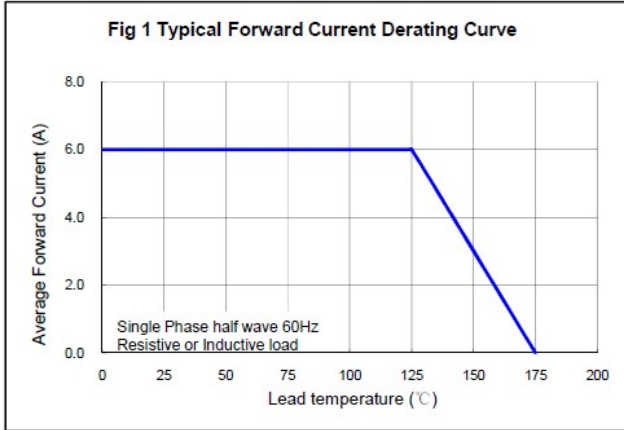
### ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units
$V_{RRM}$	DC Blocking Voltage	400	V
$I_{F(AV)}$	Average Forward Current	6	A
$I_{FSM}$	Peak Forward Surge Current, 8.3ms single half sine-wave	50	A
$T_J$	Operating Junction Temperature	-55~+175	°C
$T_{STG}$	Storage Temperature	-55~+150	°C

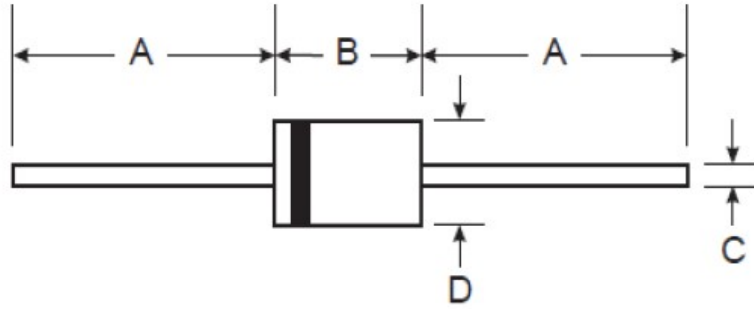
### ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
$V_F$	Forward Voltage	$I_F = 6A$ Ta=25°C		1.25	1.40	V
		$I_F = 6A$ Ta=125°C		1.10	1.25	V
$V_R$	Reverse Breakdown Voltage	$I_R = 50\mu A$	400			V
$I_R$	Reverse Leakage Current	$V_R = 400V$ Ta=25°C			2	$\mu A$
		$V_R = 400V$ Ta=125°C			50	$\mu A$
$T_{rr}$	Reverse Recovery Time	$I_F = 0.5A, I_R = 1A$ $I_{rr} = 0.25A$		20	30	ns
		$I_F = 1A, V_R = 30V$ $di/dt = -200A/\mu s$		20		ns

### ELECTRICAL CHARACTERISTICS CURVE



**DO-201AD(DO-27) PACKAGE OUTLINE DIMENSIONS**



DO-201AD(DO-27) Plastic				
Dim	Min		Max	
	Inch	mm	Inch	mm
A	1.0	25.4	-	-
B	0.285	7.2	0.375	9.5
C	0.039	1.0	0.052	1.3
D	0.190	4.8	0.210	5.3