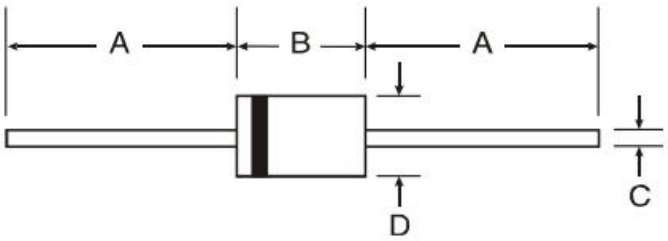
6A05G-6A10G Series

6.0A Silicon Rectifier

Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Lowpower loss
- Glass passivated chip junction

Dimensions(R-6)



Symbol	Millimeters	
	Min.	Max.
A	25.4	--
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10

Maximum Ratings and Electrical Characteristics(T_A=25℃ unless otherwise specified)

Rating		Symbol	6A05G	6A1G	6A2G	6A4G	6A6G	6A8G	6A10G	Unit
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
Average Forward Current @Half-sine wave, Resistance load		I_O	6							A
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, T_A=25 ℃		I_{FSM}	175							A
Maximum forward Voltage at 6A		V_F	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage	@T_J =25°C	I_R	5							μA
	@T_J =125°C		500							
Current squared time @1ms≤t8.3≤ms T_A=25 ℃,Rating of per diode		I^2t	127.1							A^2s
Typical Thermal Resistance		R_{thJA}	20							°C/W
Operating Temperature Range		T_J	-55 to +150							°C
Storage Temperature Range		T_{STG}	-55 to +150							°C

Ratings and Characteristic Curves (T_A=25℃ unless otherwise noted)

Figure 1. Forward Current Derating Curve

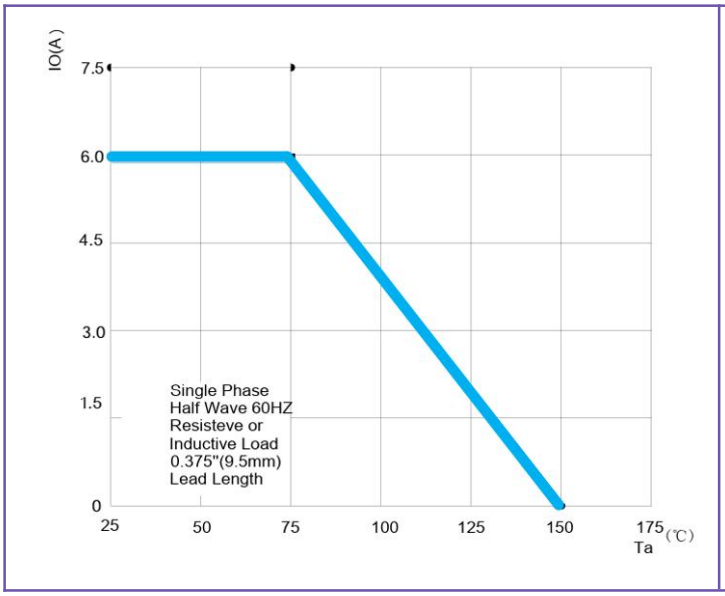


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

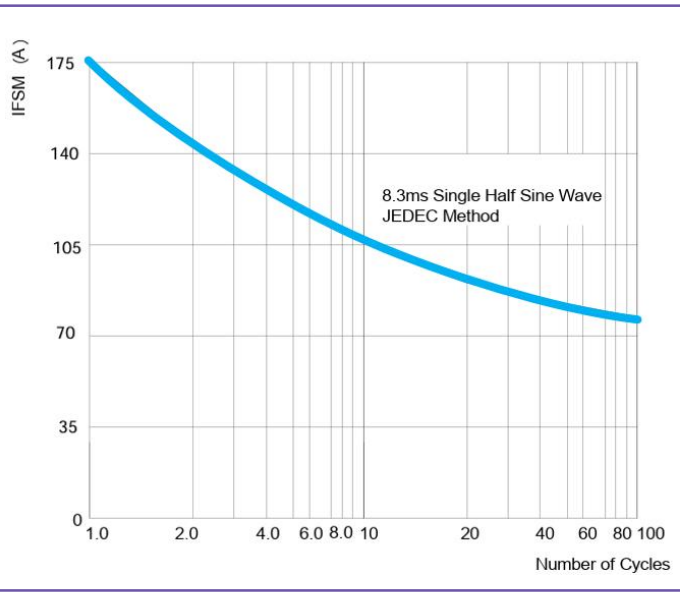


Figure 3. Typical Instantaneous Forward Characteristics

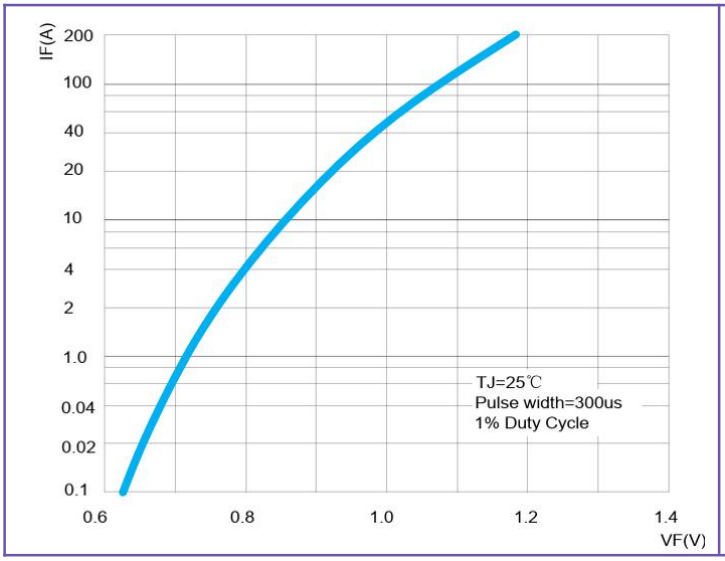
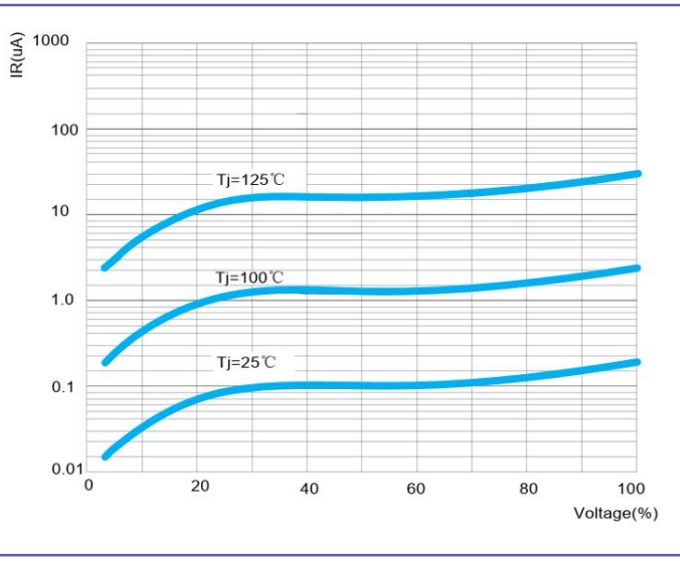
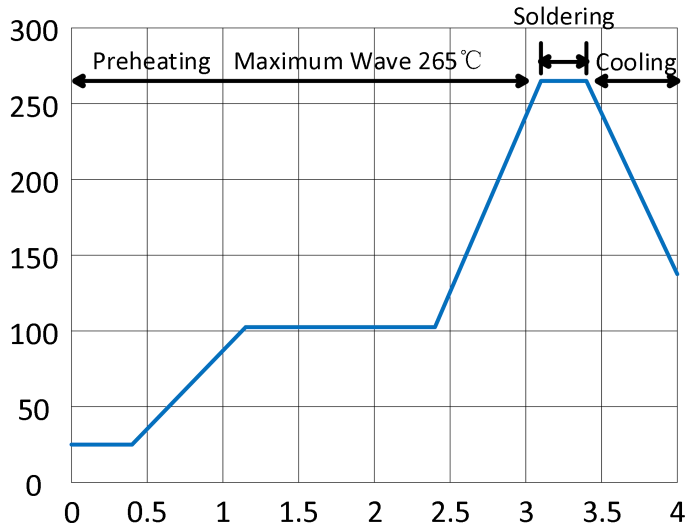


Figure 4. Typical Reverse Leakage Characteristics



Wave Soldering Parameters



Condition	Lead-free Assembly
Peak Temperature	265℃
Dipping Time	10 seconds
Soldering	1 time