

R-6 Plastic-Encapsulate Diodes

General Purpose Rectifier Diodes

Features:

- Glass passivated chip junction
- High current capability, Low V_F
- High reliability
- High surge current capability
- Low power loss
- RoHS Compliant

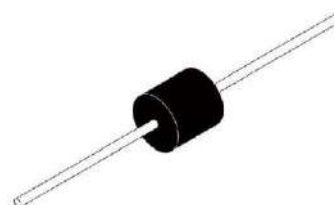
Applications:

- Rectifier

Marking

- 6AX
- X : From 05G To 10G

R-6



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	6A						
				05G	1G	2G	4G	6G	8G	10G
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=75^\circ\text{C}$	6.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	250						
Junction Temperature	T_J	$^\circ\text{C}$		-55 ~ +150						
Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

Electrical Characteristics (T=25 $^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max	
Peak Forward Voltage	V_F	V	$I_F=6.0\text{A}$	1.0	
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	10.0
	I_{RRM2}			$T_a=100^\circ\text{C}$	100
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	50	
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	Between junction and ambient	10	
	$R_{\theta J-L}$		Between junction and Lead	5	

Notes:

Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length,P.C.B. mounted

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

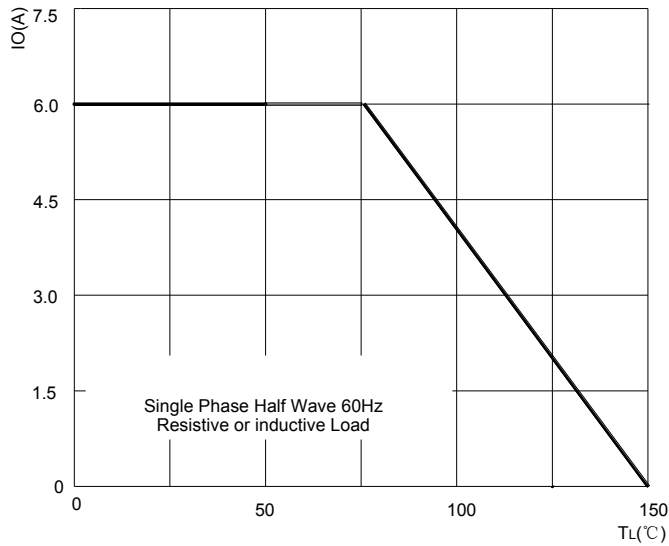


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

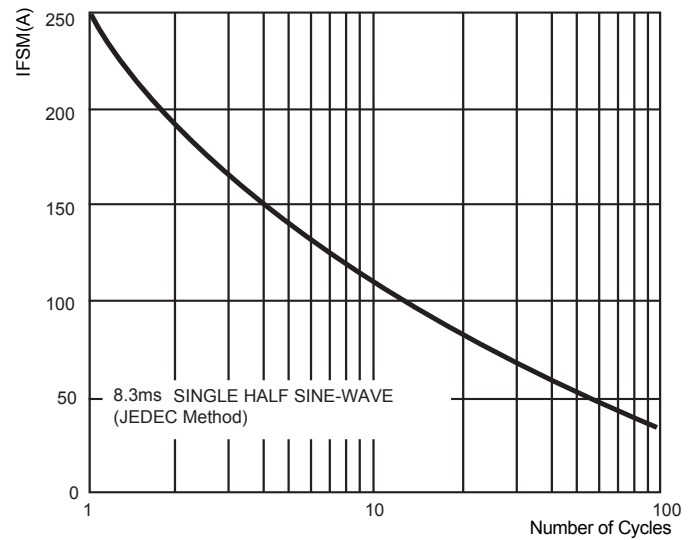


FIG.3: TYPICAL FORWARD CHARACTERISTICS

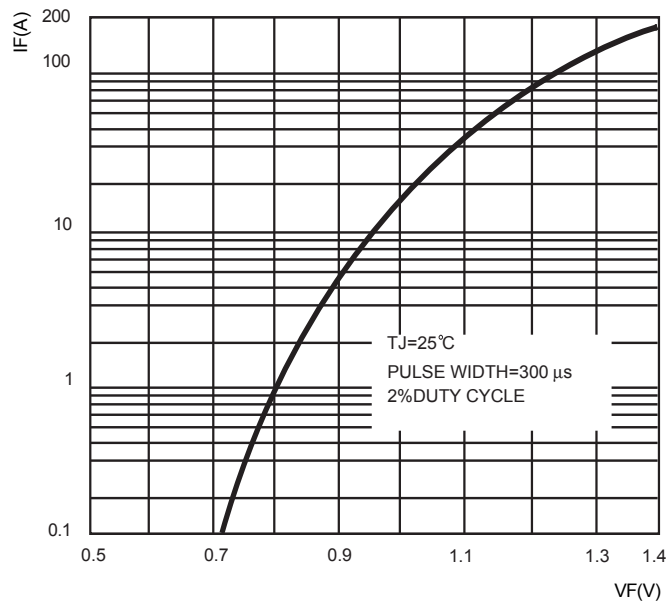
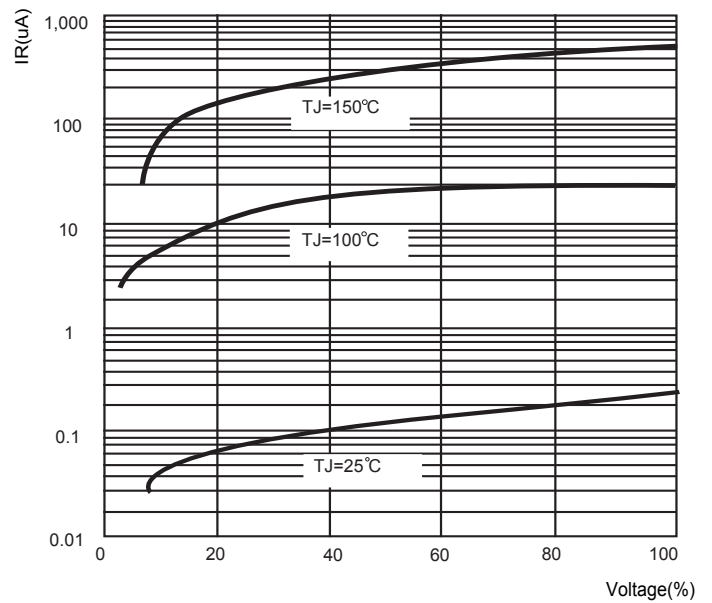
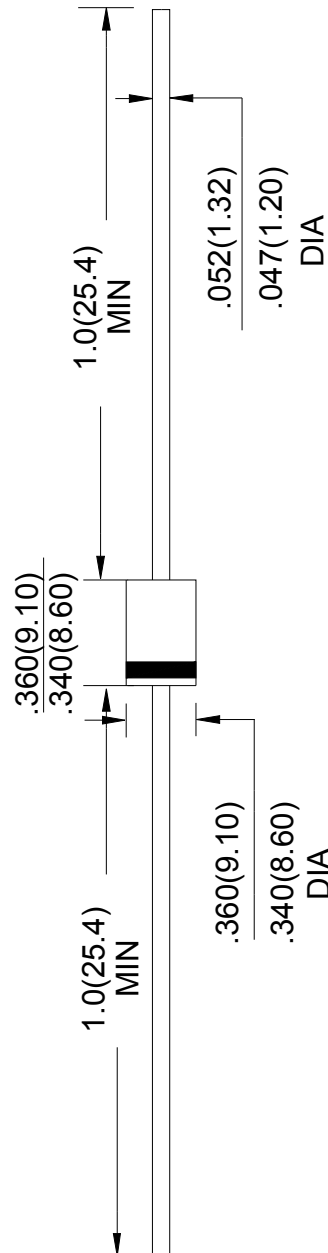


FIG.4: TYPICAL REVERSE CHARACTERISTICS



R-6 Package Outline Dimensions



Unit: in inches (millimeters)