



**5A05-5A10 General Purpose Rectifier**

**Feature**

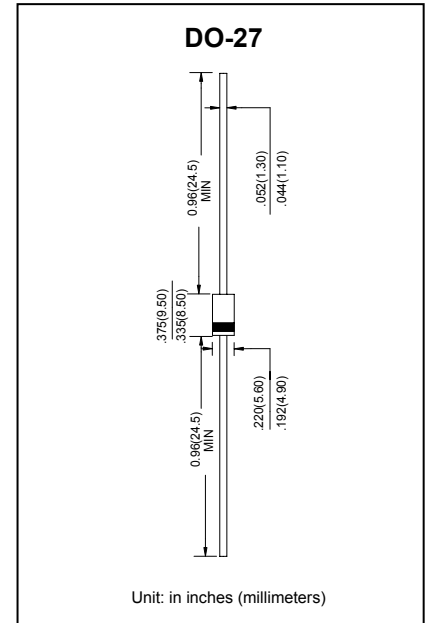
- $I_o$  5A
- $V_{RRM}$  50V-1000V
- Low reverse leakage
- High surge current capability

**Application**

- Rectifier

**Application**

- 5AX
- X : From 05 To 10



**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$  unless otherwise noted)**

Parameter	Symbol	5A							Unit
		05	1	2	4	6	8	10	
Repetitive 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
Average Forward Current 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	$I_{F(AV)}$	5							A
Non-repetitive Peak Forward Surge Current 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	$I_{FSM}$	300							A
Junction Temperature	$T_J$	-55 ~ +125							$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150							$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$  unless otherwise noted)**

Parameter	Symbol	Test Condition	Max	Unit
Peak Forward voltage	$V_{FM}$	$I_{FM}=5A$	1.2	V
Peak Reverse Current	$I_{RRM1}$	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	5
	$I_{RRM2}$		$T_a=125^\circ\text{C}$	50
Thermal Resistance (Typical)	$R_{\theta J-A}$	Between junction and ambient	20	$^\circ\text{C/W}$
	$R_{\theta J-L}$	Between junction and lead	10	$^\circ\text{C/W}$

**Typical Characteristics**

FIG.1: FORWARD CURRENT DERATING CURVE

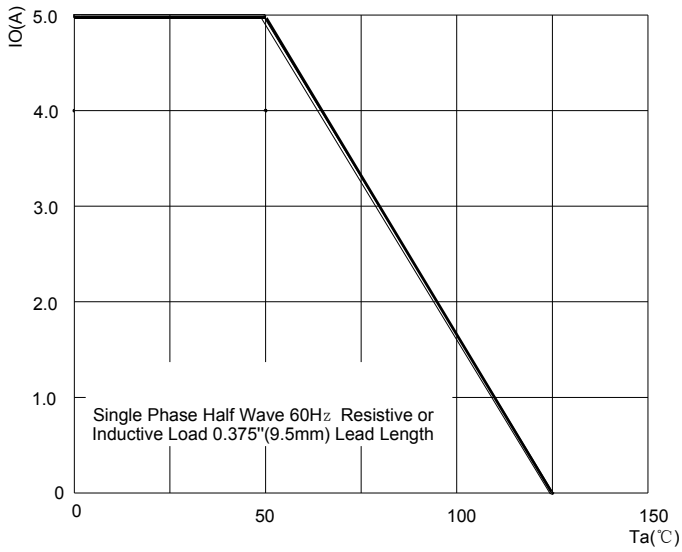


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

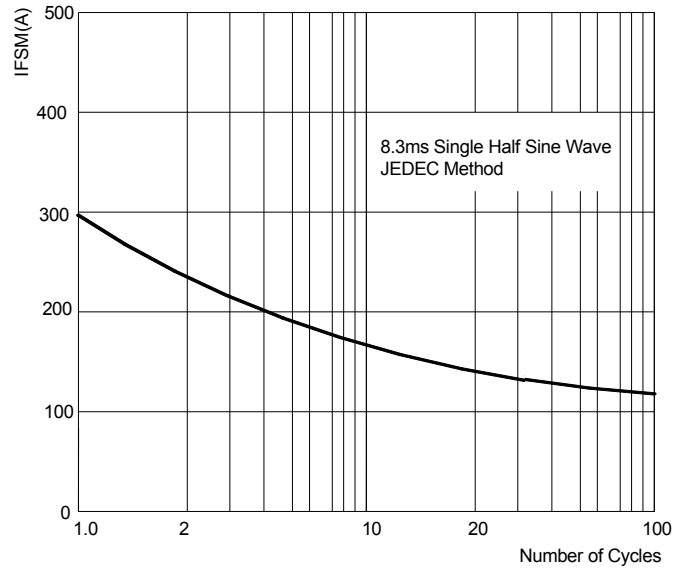


FIG.3: TYPICAL FORWARD CHARACTERISTICS

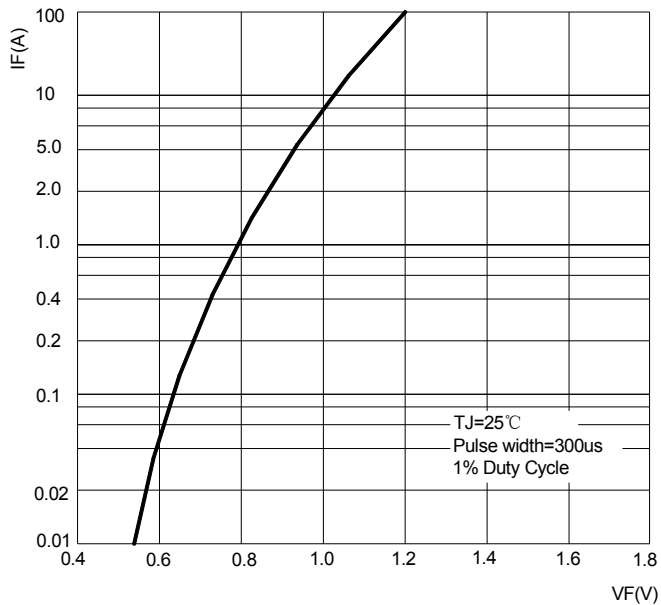


FIG.4: TYPICAL REVERSE CHARACTERISTICS

