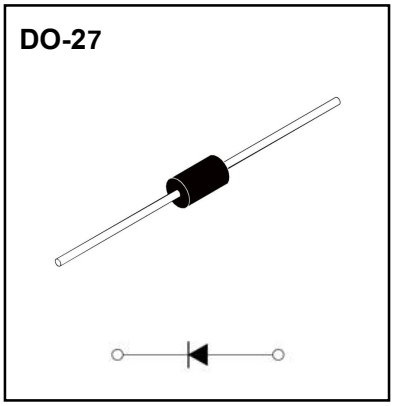
Features

- $I_{F(AV)}$ 3.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode



Applications

- Rectifier

Marking

- 1N54XX

  XX: From 00 To 08

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	1N54								
				00	01	02	03	04	05	06	07	08
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	300	400	500	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	210	280	350	420	560	700
Maximum DC Blocking Voltage	V_{DC}	V		50	100	200	300	400	500	600	800	1000
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, T_a=75℃	3								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	150								
Junction Temperature	T_J	℃		-55 ~ +150								
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		Value
Maximum Peak Forward Voltage	V_{FM}	V	I_{FM}=3.0A		1.1
Maximum Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	T_a=25℃	5
	I_{RRM2}			T_a=125℃	100
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		30
Typical Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient		20
	$R_{\theta J-L}$		Between junction and Lead		10

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

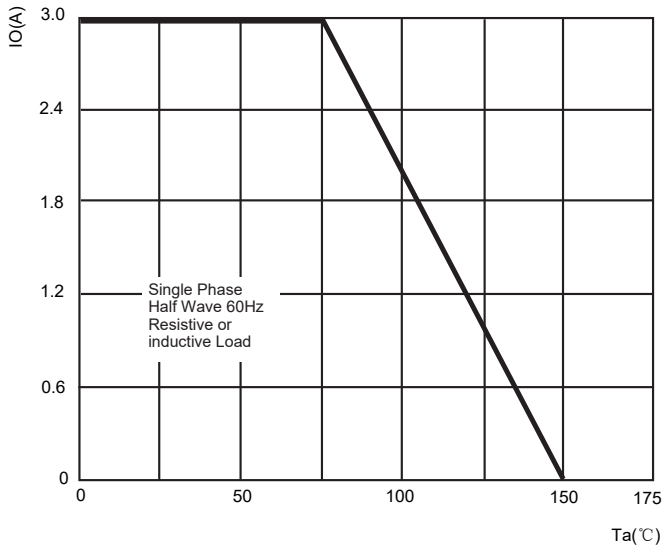


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

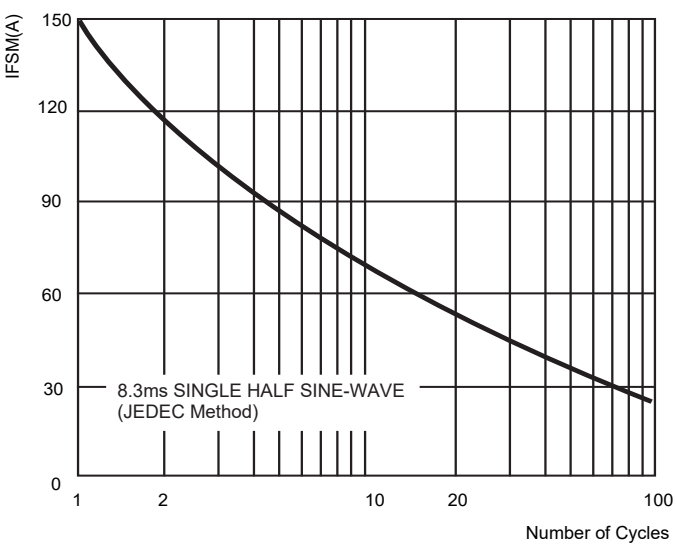


FIG.3: TYPICAL FORWARD CHARACTERISTICS

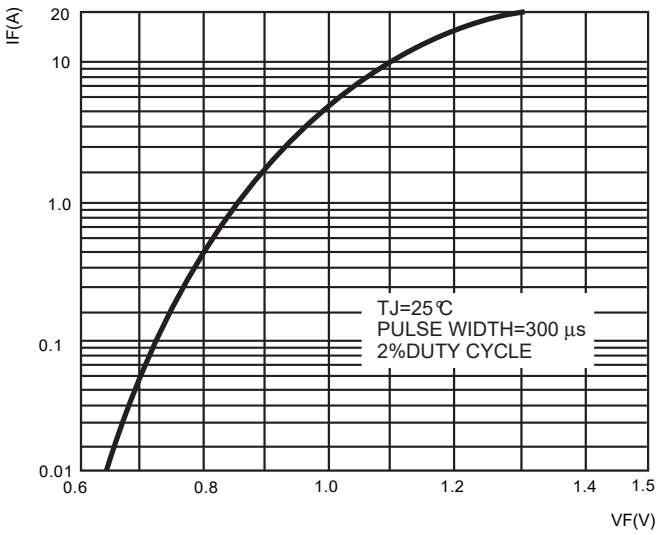
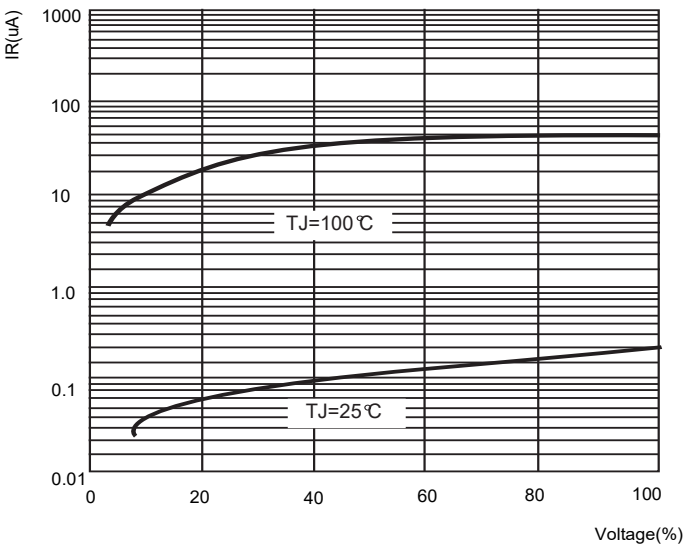
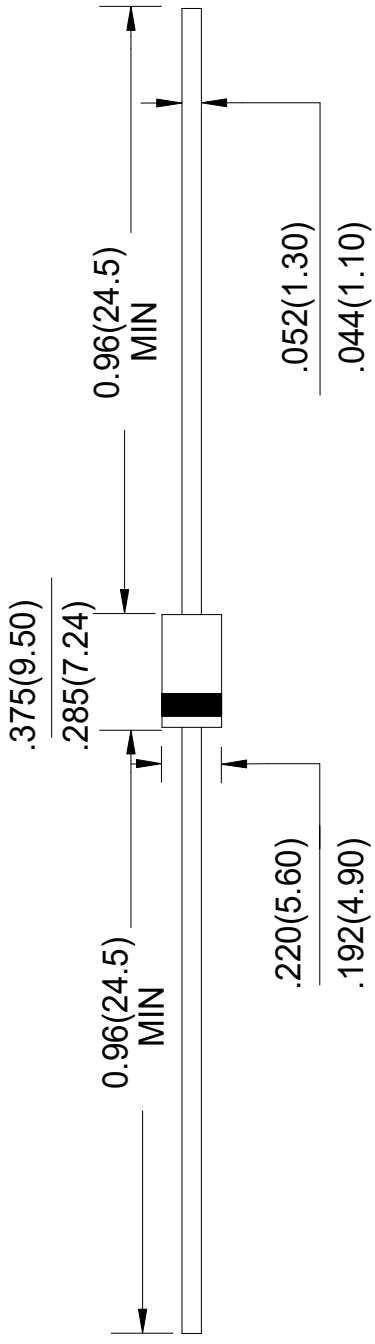


FIG.4：TYPICAL REVERSE CHARACTERISTICS





Unit: in inches (millimeters)