

General Purpose Rectifier

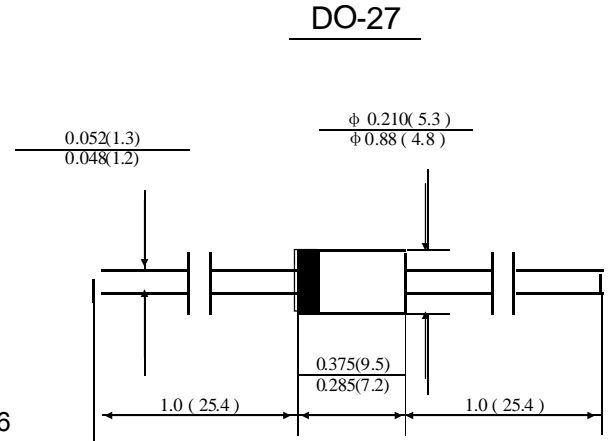
RoHS
COMPLIANT

Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss

Mechanical Data

- **Package:** JEDEC DO-27, molded plastic
Molding compound meets UL 94 V-0 flammability rating,
RoHS-compliant
- **Terminals:** Axial leads. Solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end



inch (mm)

Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNIT
Device marking code		1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	
Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Average Forward Current @60Hz Half-sine wave, Resistance load, T _a =50°C	I _{F(AV)}	3.0							A
Surge(Non-repetitive)Forward Current @60HZ Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	150							A
Storage Temperature	T _{stg}	-55 ~+150							°C
Junction Temperature	T _j	-55~+125							°C

Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNIT
Maximum instantaneous forward voltage drop per diode	V _{FM}	IFM=3.0A	1.0							V
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	T _a =25°C	2.5							μA
	I _{RRM2}	T _a =100°C	50							
Typical junction capacitance	C _j	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	50							pF

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

PARAMETER	SYMBOL	UNIT	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	20						

Characteristics (Typical)

FIG.1: I_o - T_a Curve

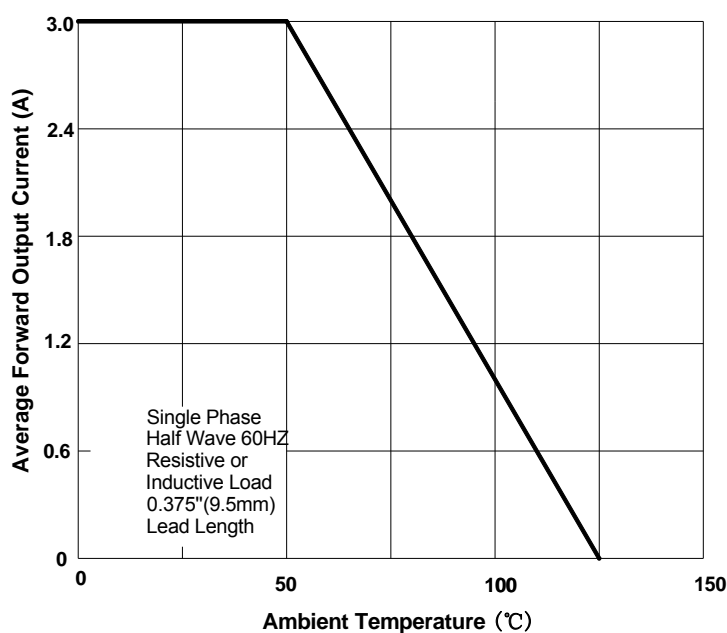


FIG.2: Surge Forward Current Capability

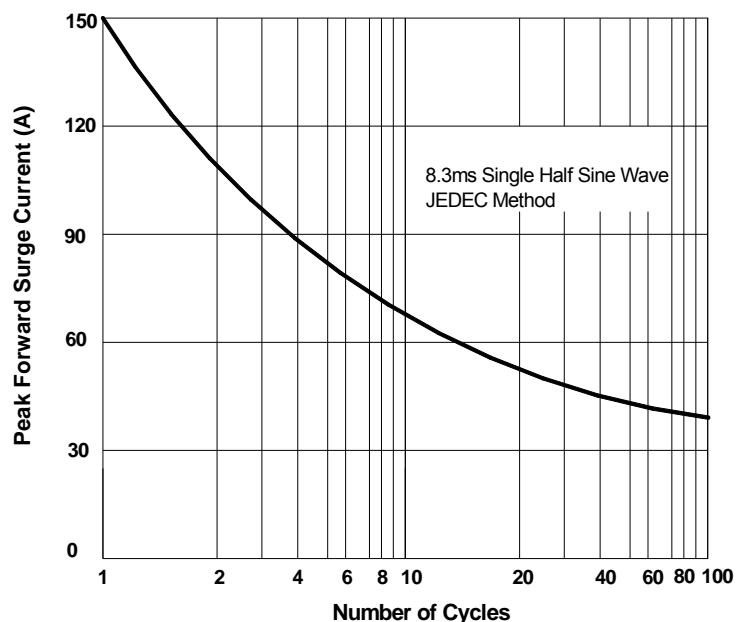


FIG.3: Forward Voltage

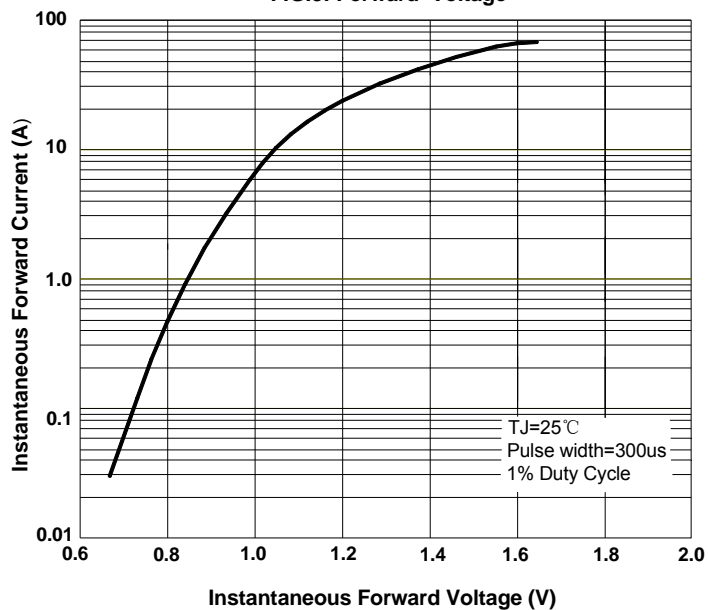
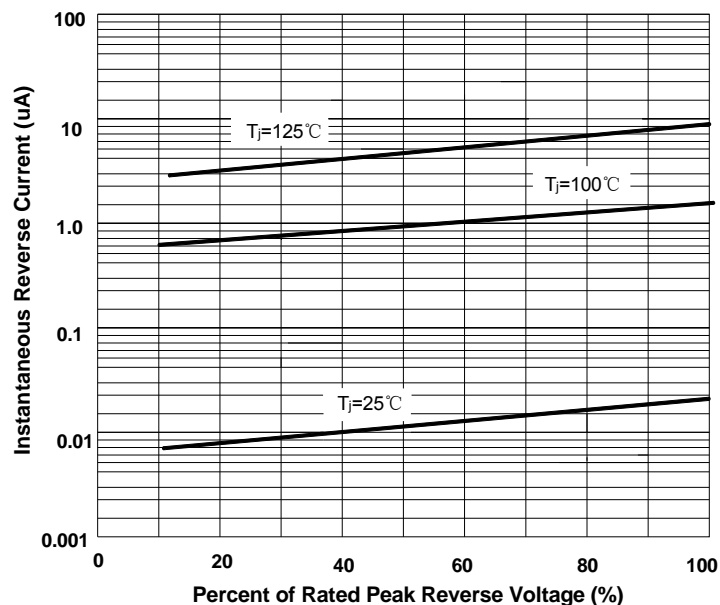


FIG.4: Typical Reverse Characteristics



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