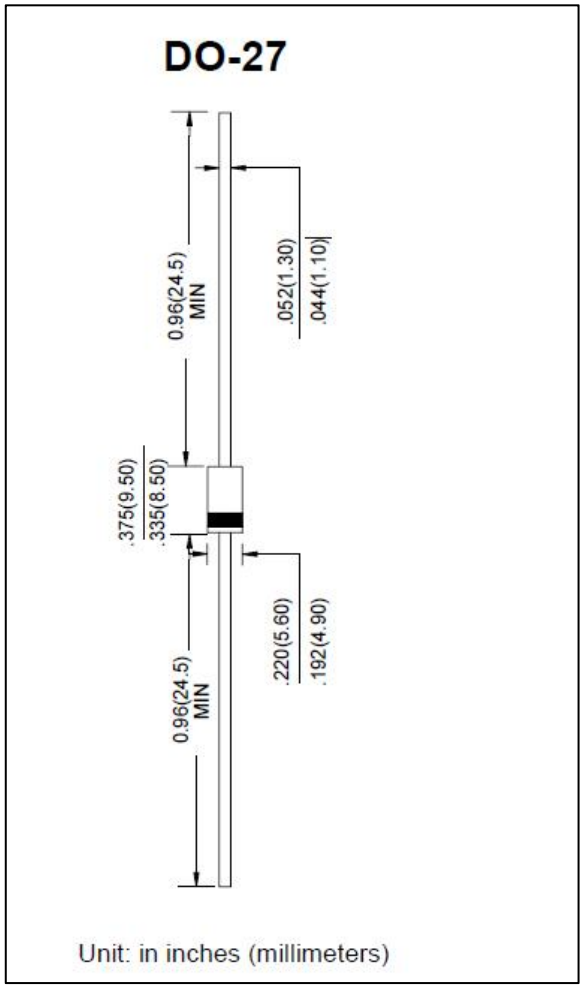
CHONGQING CLOUDCHILD TECHNOLOGY CO., LTD

DO-27 Encapsulate General Purpose Rectifier

1N5400-1N5408 General Purpose Rectifier



Features

- Io 3A.
- VRRM 50V-1000V.
- Low reverse leakage
- High surge current capability
- AEC-Q101 Qualified.

Application

- Rectifier.

Marking

- 1N54XX

  XX:From 00 To 08

ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	1N54									Unit
		00	01	02	03	04	05	06	07	08	
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Average Forward Current 60Hz Half-sine wave, Resistance load, T_a=50℃	$I_{F(AV)}$	3									A
Non-repetitive Peak Forward Surge Current 60Hz Half-sine wave ,1 cycle ,T_a =25℃	I_{FSM}	200									A
Junction Temperature	T_J	-55 ~ +125									℃
Storage Temperature	T_{STG}	-55 ~ +150									℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition		Max	Unit
Peak Forward voltage	V_{FM}	I_{FM}=3A		1.1	V
Peak Reverse Current	I_{RRM1}	V_{RM}=V_{RRM}	T_a=25℃	5	uA
	I_{RRM2}		T_a=125℃	50	uA
Thermal Resistance (Typical)	$R_{\theta J-A}$	Between junction and ambient		20	℃/W
	$R_{\theta J-L}$	Between junction and lead		10	℃/W

Typical Characteristics

FIG.1 : FORWARD CURRENT DERATING CURVE

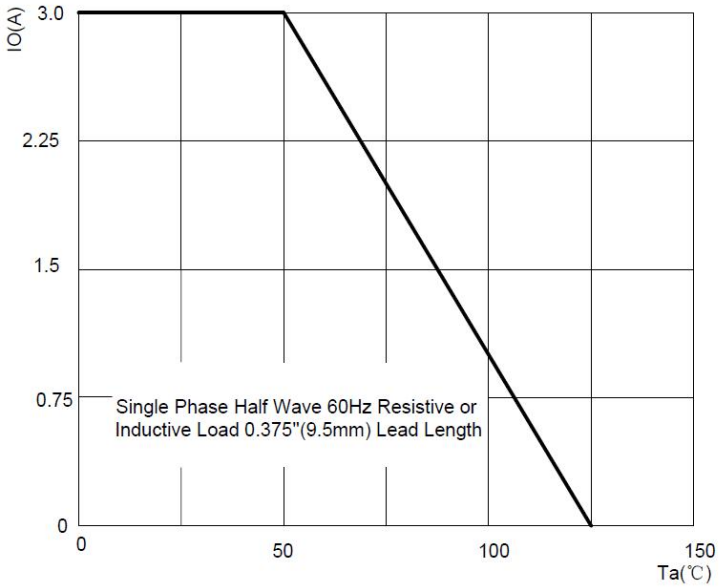


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

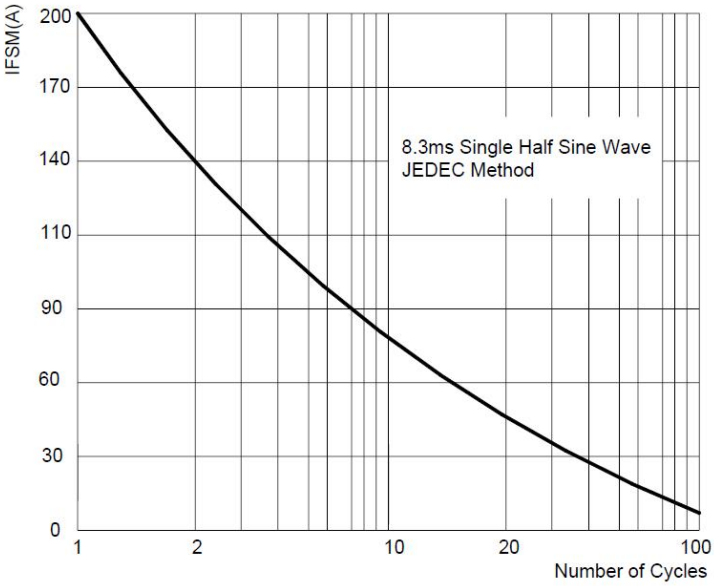


FIG.3: TYPICAL FORWARD CHARACTERISTICS

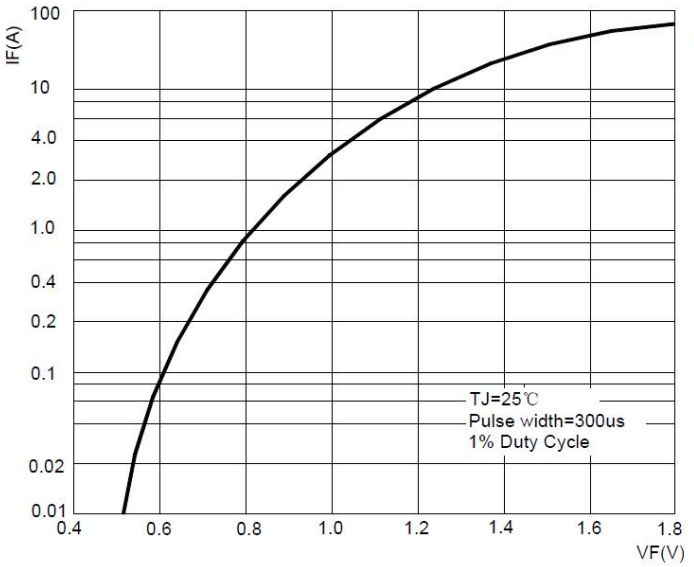
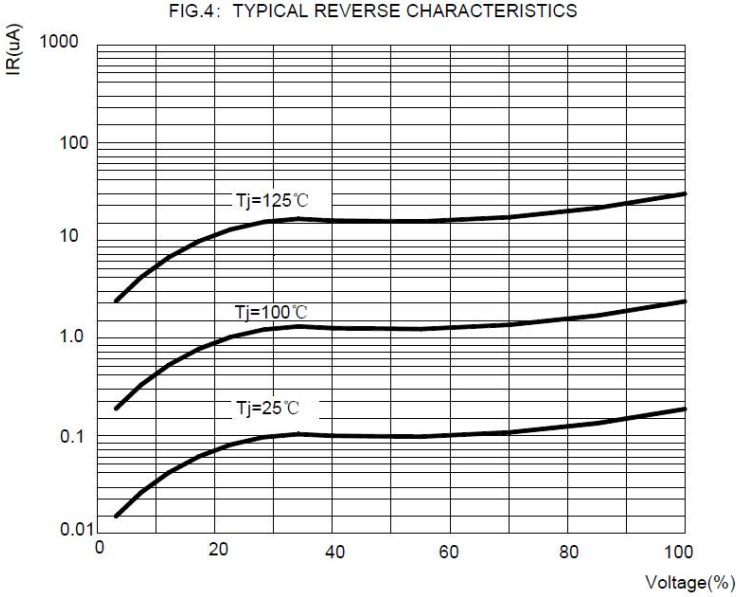


FIG.4: TYPICAL REVERSE CHARACTERISTICS



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Date of change	Rev #	revise content
2023/09/01	A/0	/