

SCHOTTKY DIODES STUD TYPE 25 A

Features

High Surge Capability

Types up to 40V V_{RRM}

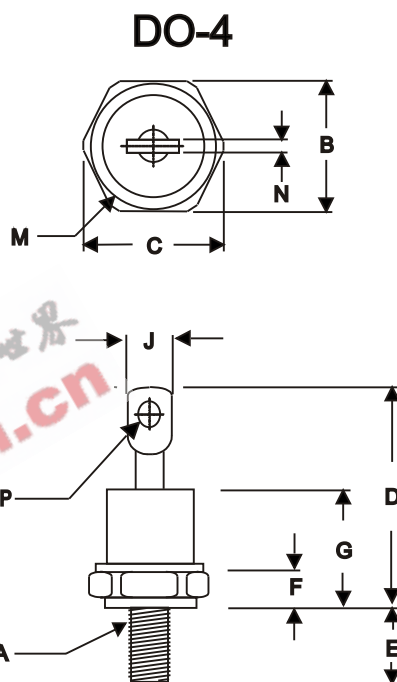
**25Amp Rectifier
20-40 Volts**

Maximum Ratings

Operating Temperature: -55 °C to +150 °C

Storage Temperature: -55 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5829 (R)	20V	14V	20V
1N5830 (R)	25V	17V	25V
1N6095 (R)	30V	21V	30V
1N5831 (R)	35V	25V	35V
1N6096 (R)	40V	28V	40V



Notes:

1. Standard Polarity: Stud is Cathode
2. Reverse Polarity: Stud is Anode

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25A	$T_C = 100\text{ }^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	800A 400A	(1N5829~1N5831) (1N6095~1N6096) 8.3ms. Half sine
Maximum Instantaneous Forward Voltage NOTE (1)	V_F	0.58V	$I_{FM} = 25\text{ A};$ $T_J = 25\text{ }^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage NOTE (1)	I_R	2.0 mA 250 mA	$T_J = 25\text{ }^{\circ}\text{C}$ $T_J = 125\text{ }^{\circ}\text{C}$
Maximum thermal resistance, junction to case	$R_{\theta jc}$	1.8 °C /W	
Mounting torque	Kgf-cm	11.0~13.4	Not lubricated threads

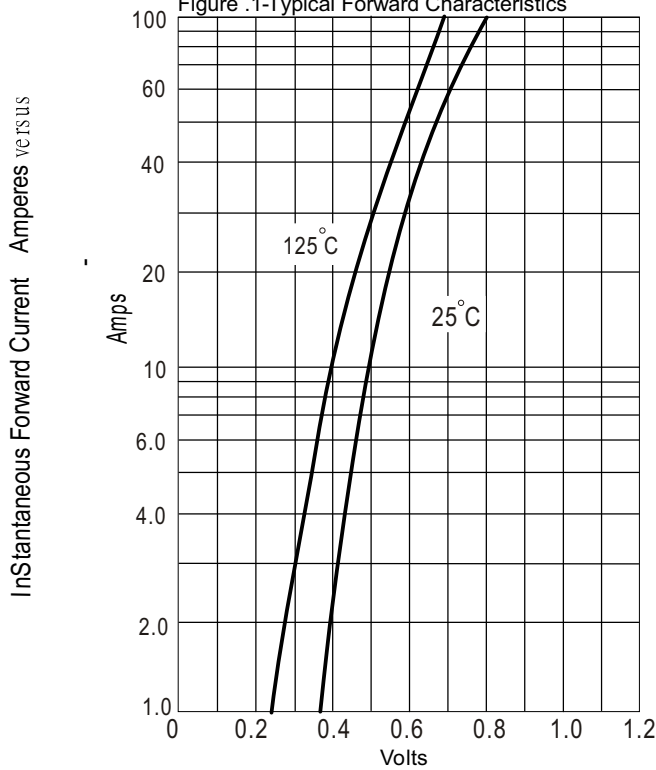
NOTE :

(1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	10-32	UNF3A	Threads	Standard	Polarity
B	.424	.437	10.77	11.10	
C	----	.505	----	12.82	
D	.600	.820	15.24	20.82	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	----	.405	----	10.29	
J	----	.310	----	7.87	
M	----	.413	----	10.49	Ø
N	.020	.065	0.51	1.65	
P	.060	.100	1.53	2.54	Ø



Figure .1-Typical Forward Characteristics



Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve

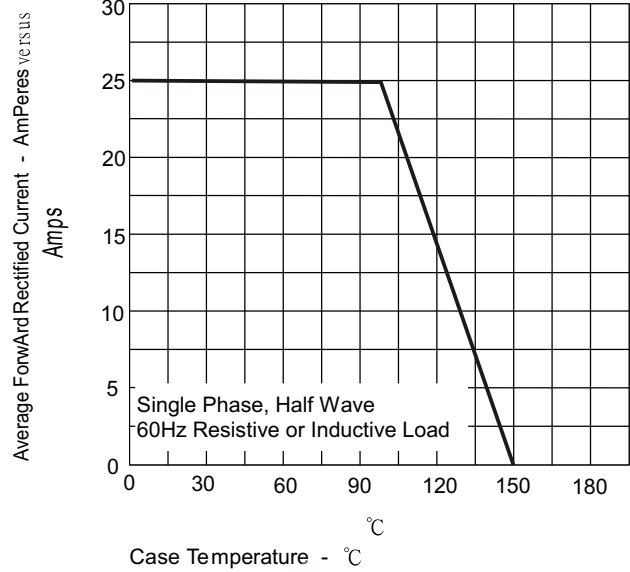


Figure .4- Typical Reverse Characteristics

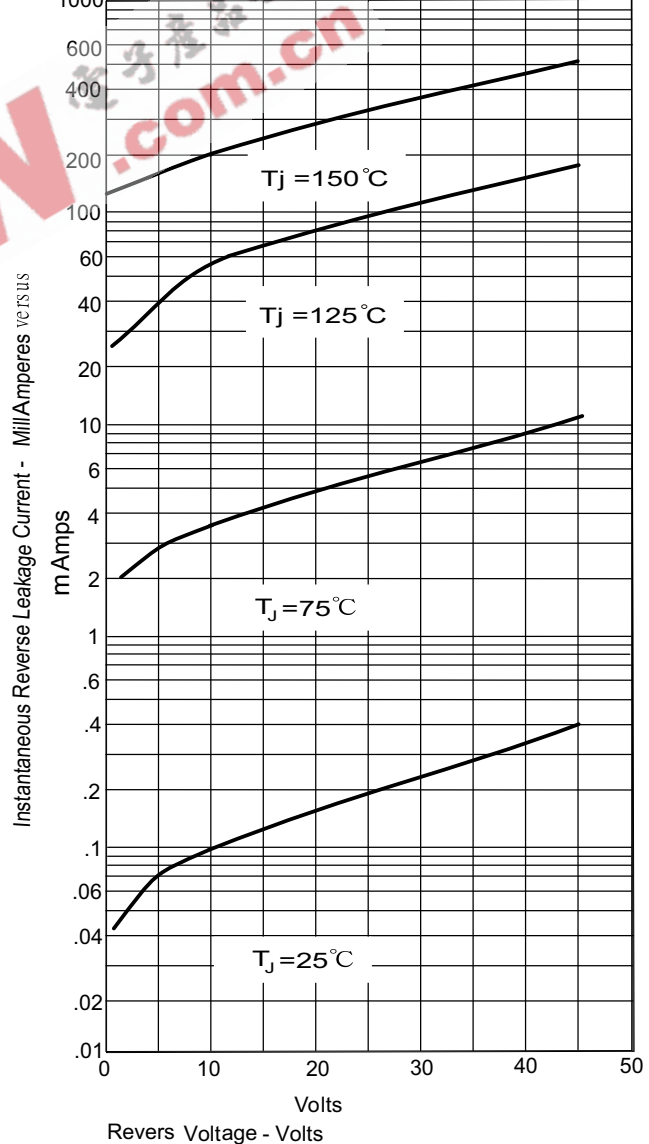
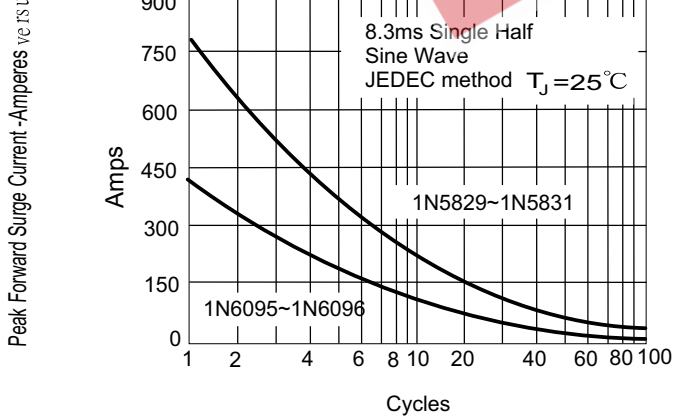


Figure .3- Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles