

SCHOTTKY DIODES STUD TYPE 30 A

Features

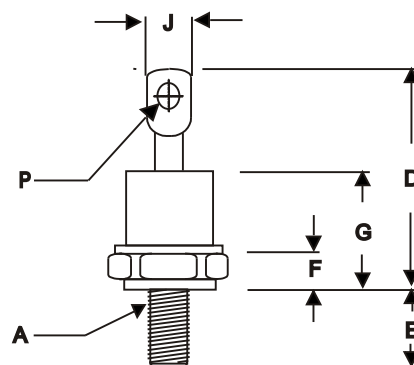
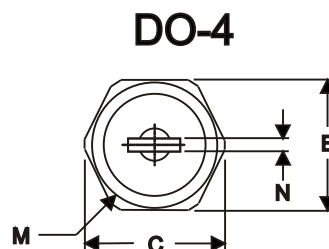
High Surge Capability
Types up to 45V V_{RRM}

30Amp Rectifier
35-45 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
SD41(R)	35V	25V	35V
SD4145(R)	45V	32V	45V



Notes:

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

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30A	$T_C = 140\text{ }^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	600A	8.3ms , Half sine
Maximum Instantaneous Forward Voltage NOTE (1)	V_F	0.68V	$I_{FM} = 30\text{ A};$ $T_J = 25\text{ }^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage NOTE (1)	I_R	1.5mA 25mA	$T_J = 25\text{ }^{\circ}\text{C}$ $T_J = 125\text{ }^{\circ}\text{C}$
Maximum thermal resistance, junction to case	$R_{\theta jc}$	1.5°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

SD41(R) THRU SD4145(R)

Figure .1-Typical Forward Characteristics

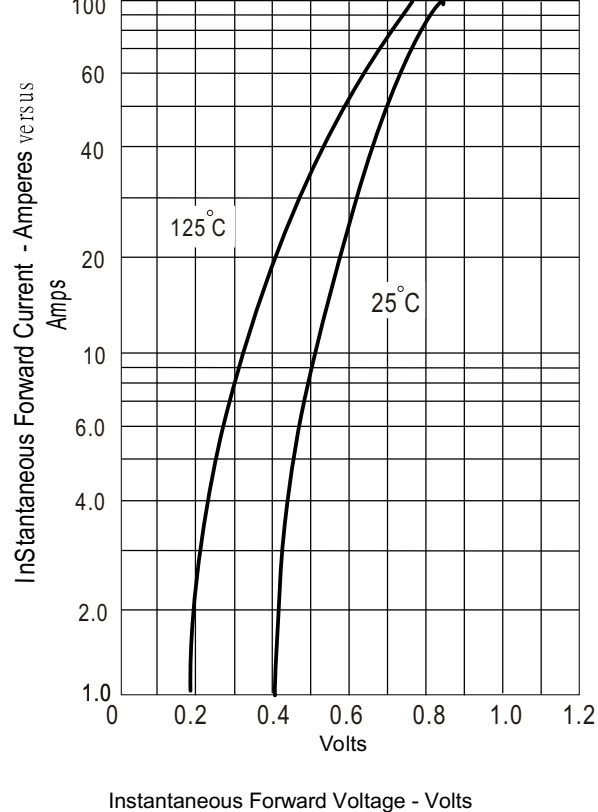


Figure .2- Forward Derating Curve

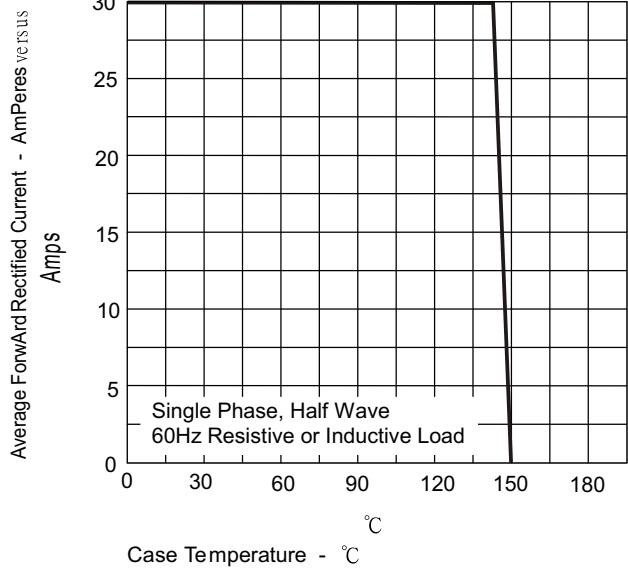


Figure .3-Peak Forward Surge Current

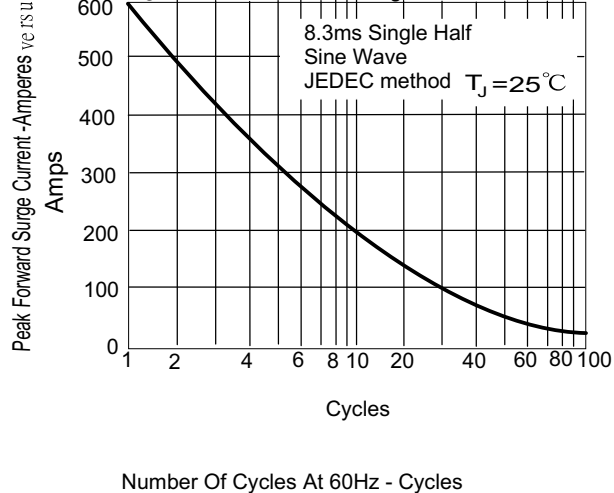


Figure .4-Typical Reverse Characteristics

