PVS1545

|	
Ultra low VF Schottky Barrier Rectifier	**Voltage Range** **45 Volts** **Current** **15.0Amperes**

Features

·Metal silicon rectifie,majority carrier conduction
·Guard ring for transient protection
·Low power loss,high efficiency
·High current capability .low VF
·High surge capacty
·Plastic package has UL flammability classification 94 V-0
·For use low voltage,high frequency inverters,free wheeling,and polarity protection applications

Mechanical Data

·Cases: JEDEC R-6 molded plastic
·Polarity:Color band cenotes cathode
·Weigh:0.07ounces 2.1grams
·Mounting position:Any

R-6

.360(9.1)
.340(8.6)

1.0(25.4) MIN

.360(9.1)
.340(8.6)

1.0(25.4) MIN

.052(1.3)
.048(1.2)
DIA
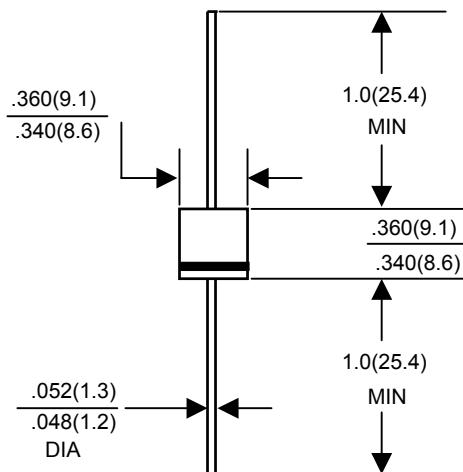
Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave,60Hz,resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		PVS1545	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	45	V
Maximum RMS Voltage	VRMS	31.5	V
Maximum DC Blocking Voltage	VDC	45	V
Maximum Average Forward Rectified Current See Fig. 1	IF(AV)	15.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	360	A
Peak Forward Voltage @ 15.0A DC(Note1)	VF	0.5	V
Maximun DC Reverse Current @ TA = 25 ℃ at Rated DC Blocking Voltage @ TA = 100℃	IR	0.5 20	mA
Typical Thermal Resistance (Note 2)	RθJA	2	℃/W
Junction temperature-sperrschichichttemperature at reduced reverse voltage VR≤80% VRRM bei reduzierter sperrspannung VR≤50% VRRM in DC forward roode-bei GL eichstrom-Durchahalss	TJ	-50 TO +150 ≤175 ≤200	℃
Storage Temperature Range	TSTG	-50 TO +150	℃

NOTES：1.   300us Pulse Width.2% Dudy Cyote.

2.   Thermal Resistance Junction to Case.

FIG.1-FORWARD CURRENT DERATING CURVE

AVERAGE FORWARD CURRENT AMPERES

VR≤50%VRRM
VR≤80%VRRM
DC

CASE TEMPERATURE℃
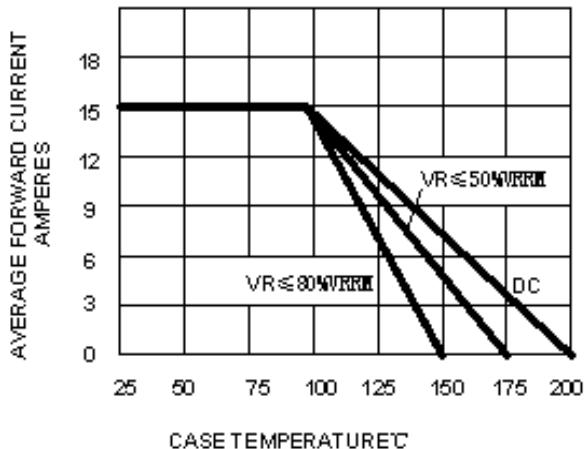
FIG.2-TYPICAL FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT(A)

TJ=25℃
PULSE WIDTH 300US
2% DUTY CYCLE

INSTANTANEOUS FORWARD VOLTAGE
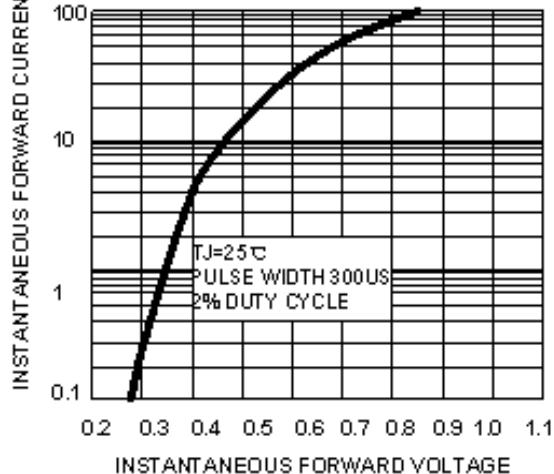
FIG.3-TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT(mA)

TJ=100℃
TJ=50℃
TJ=25℃
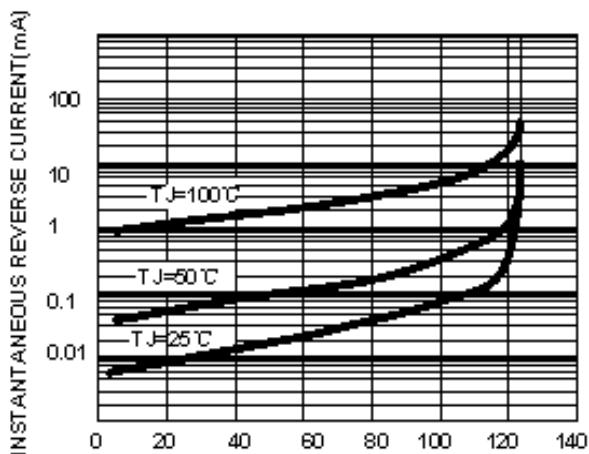
FIG.4-MAXIMUM NON-REPETITIVE SURGE

PEAK FORWARD SURGE CURRENT AMPERES

8.3Single Half-Sine-Wave
(JEDEC METOD)