

TECHNICAL DATA DATA SHEET 973, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

**DESCRIPTION:** A 150 VOLT, 15 AMP, SINGLE / DOUBLER; 30 AMP COMMON CATHODE / COMMON ANODE, POWER SCHOTTKY RECTIFIER IN A TO-254 PACKAGE.

ADD THE LETTER "C" AFTER THE PREFIX SHD TO ORDER THE DEVICE WITH CERAMIC SEALS.

MAXIMUM RATINGS	ALL RATINGS ARE AT $T_{\rm C}$ = 25 $^{\circ}{\rm C}$ UNLESS OTHERWISE SPECIFIED.			
RATING		SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)		PIV	150	Volts
MAXIMUM DC OUTPUT CURRENT (PER LEG) SINGLE / DOUBLER	(T <sub>C</sub> = 100 °C)	Ι <sub>Ο</sub>	15	Amps
MAXIMUM DC OUTPUT CURRENT (PER LEG) COMMON CATHODE / COMMON ANODE	(T <sub>C</sub> = 100 °C)	Ι <sub>Ο</sub>	30	Amps
MAXIMUM NONREPETITIVE FORWORD SURGE CURRENT (t = 8.3ms, Sine) (PER LEG)			150	Amps
JUNCTION CAPACITANCE $V_R = 5Vdc, f = 1MHz$		C <sub>T</sub>	500	pF
$V_{SIG} = 50 \text{mV} \text{ (p-p)} \text{ (Max)}$				
MAXIMUM THERMAL RESISTANCE (PER LEG)		$R_{ extsf{ heta}JC}$	1.44	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE		T <sub>op</sub>	-65 to +200	°C
MAXIMUM STORAGE TEMPERATURE RANGE		T <sub>stg</sub>	-65 to +175	°C

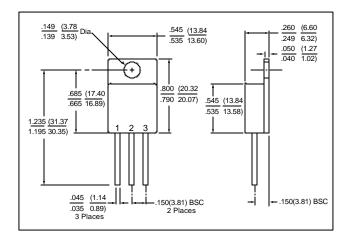
# ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP (per leg, $I_F = 15A$ )			
$T_J = 25 \ ^{\circ}C$	V <sub>f</sub>	0.95	Volts
T <sub>J</sub> = 125 °C		0.79	Volts
MAXIMUM REVERSE CURRENT Ir @ PIV (per leg, Ir @ 150V PIV))			
$T_J = 25 \ ^{\circ}C$	l <sub>r</sub>	0.7 8.0	mA mA
T <sub>J</sub> = 125 °C		0.0	

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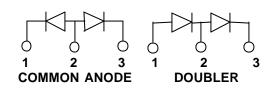
SHD125245 SHD125245P SHD125245N SHD125245D

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1 2 3 1 2 3 SINGLE COMMON CATHODE

**MECHANICAL DIMENSIONS: In Inches / mm** 



<u>TO-254</u>

### **PINOUT TABLE**

ТҮРЕ	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DOUBLER (D)	ANODE	ANODE/CATHODE	CATHODE



### **TECHNICAL DATA**

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