

TECHNICAL DATA
DATA SHEET 743, REV. -
FORMERLY PART NUMBER SHD1225P/N/D

HIGH CURRENT HERMETIC SCHOTTKY POWER MODULE

DESCRIPTION: A 30 VOLT, 150/120 AMP, POWER SCHOTTKY RECTIFIER IN A POTTED PACKAGE.

MAXIMUM RATINGS

ALL RATINGS ARE @ $T_c = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	30	Volts
MAXIMUM DC OUTPUT CURRENT @ $T_c=100^\circ\text{C}$ (COMMON CATHODE & COMMON ANODE) (per device)	I_o	150	Amps
MAXIMUM DC OUTPUT CURRENT @ $T_c=100^\circ\text{C}$ (DOUBLER) (per device)	I_o	120	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (per leg) (t = 8.3ms, Sine)	I_{FSM}	1000	Amps
MAXIMUM JUNCTION CAPACITANCE (per leg) ($V_r = 5\text{V}$)	C_T	6600	pF
MAXIMUM THERMAL RESISTANCE	$R_{\theta JC}$	0.2	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to +150	$^\circ\text{C}$

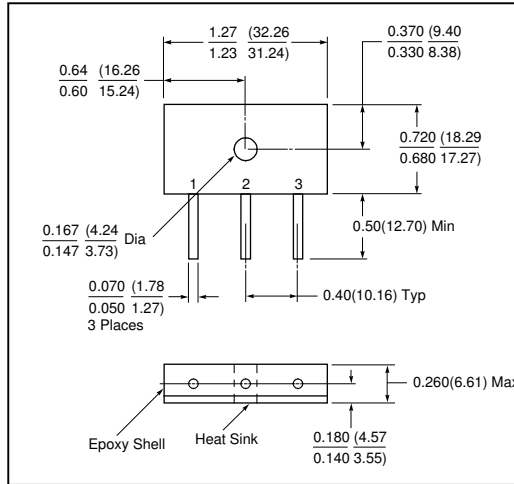
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 120$ Amps) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.65 0.55	Volts
MAXIMUM REVERSE CURRENT (I_r @ 30 V PIV) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	12 600	mA

SENSITRON

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MECHANICAL DIMENSIONS: IN Inches / mm



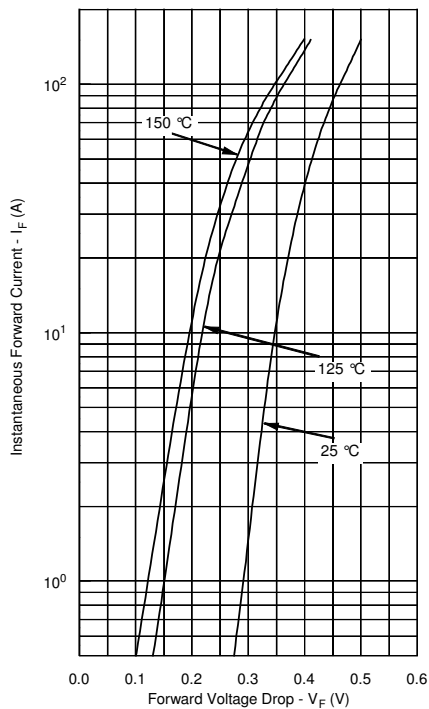
PKG. 22

PINOUT TABLE

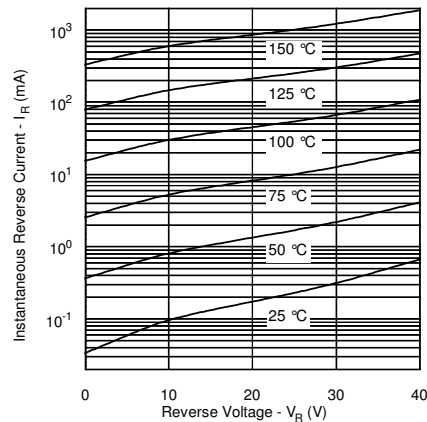
DEVICE TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER/COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER/COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER/DOUBLER (D)	ANODE	ANODE/CATHODE	CATHODE

Note: V_f Curves shown are for die only.

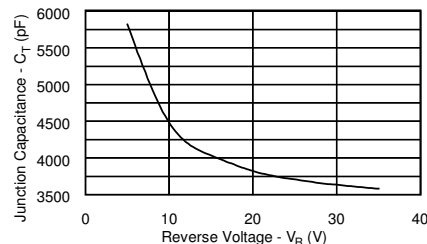
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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