

TECHNICAL DATA
DATA SHEET 6080, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER

175°C Maximum Operation Temperature

DESCRIPTION: A 250-VOLT, 7.5/15 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

MAXIMUM RATINGS

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

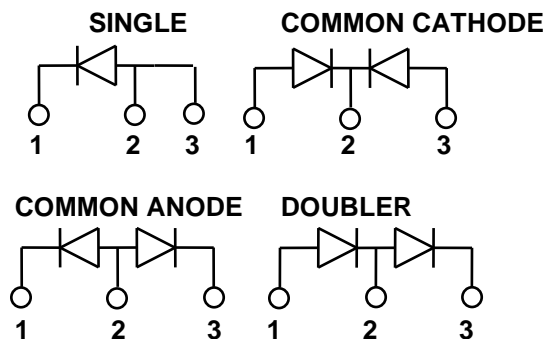
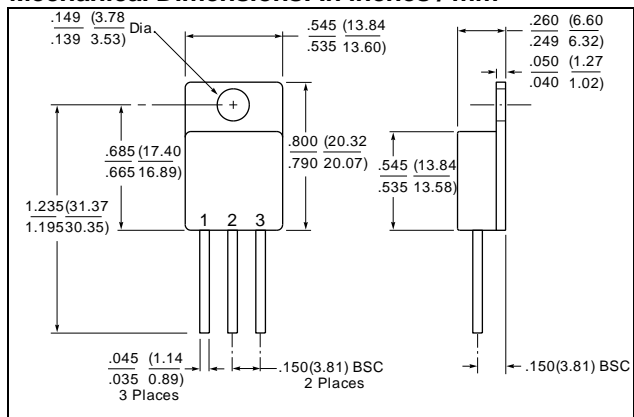
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	250	Volts
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100\text{ }^\circ\text{C}$) (Single, Doubler)	I_o	7.5	Amps
MAXIMUM DC OUTPUT CURRENT (@ $T_C=100\text{ }^\circ\text{C}$) (Common Cathode, Common Anode)	I_o	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine) per leg	I_{FSM}	75	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r=10\text{V}$)	C_T	100	pF
MAXIMUM THERMAL RESISTANCE (per leg)	$R_{\theta JC}$	5.37	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	T_{op}/T_{stg}	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	T_{op}/T_{stg}	-65 to + 175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 7.5\text{ Amps}$) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	V_f	0.98 0.83	Volts
MAXIMUM REVERSE CURRENT (I_r @ 250 V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	I_r	0.2 1.0	mA

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Mechanical Dimensions: In inches / mm



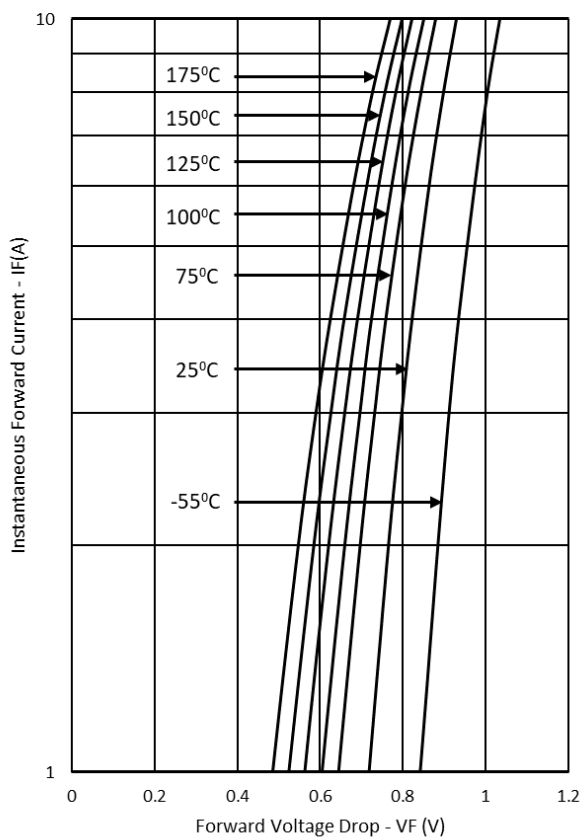
TO-254

PINOUT TABLE

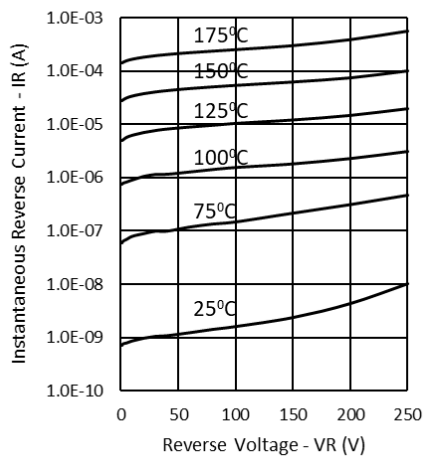
TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE

Curves shown are for bare die only.

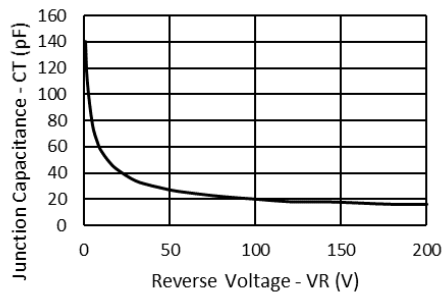
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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PART ORDERING INFORMATION:

SHDX**1251F9**X XX X

C=Ceramic Seals

Pinout (see table)

Screening Level (blank is no screening):

Suffix	Screened in Accordance with:
blank	No screening level
S	MIL-PRF-19500, TXV Level
SS	MIL-PRF-19500, S Level

QCI (blank is no QCI):

Suffix	Inspection in Accordance with:
blank	No QCI
Q	MIL-PRF-19500 QCI

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