

HV5 THRU HV6



DO-15

FEATURES

- Fast recovery times
- High surge capability
- Low leakage current
- High current capability
- High voltage

PRIMARY CHARACTERISTICS

IF(AV)	0.2 A
VRRM	5000 V to 6000 V
IFSM	25A
VF	8.0 V
IR	5.0 μ A
TJ max.	150 °C

MECHANICAL DATA

Case: DO-15 molded plastic body

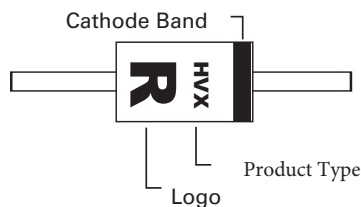
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.36 grams

Part Marking System



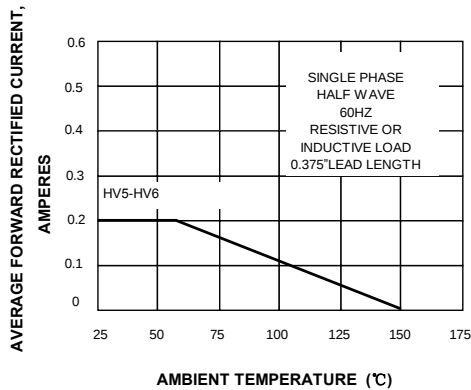
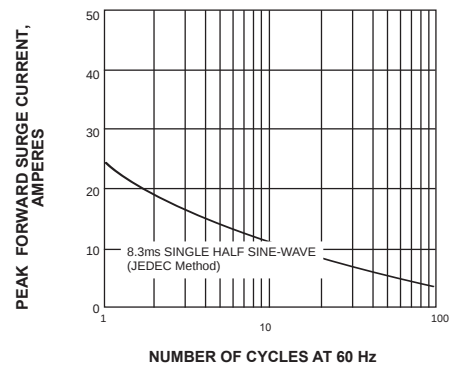
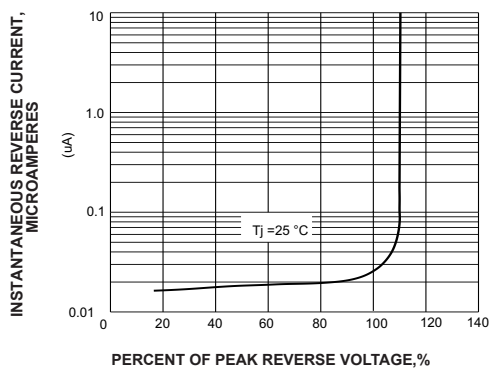
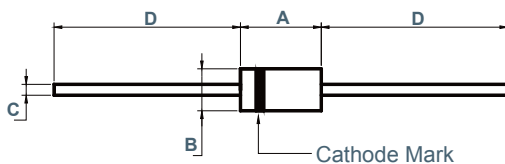
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	HV5	HV6	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	5000	4000	VOLTS
Maximum RMS voltage Maximum	V_{RMS}	3500	2800	VOLTS
DC blocking voltage	V_{DC}	5000	4000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	0.2		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0		Amps
Maximum instantaneous forward voltage at 0.2A	V_F	8.0		Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0		μA
Maximum Reverse Recovery Time (Note)	T_{rr}	500		nSec
Typical junction capacitance (NOTE 1)	C_j	15.0		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0		$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150		$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)
FIG. 1- FORWARD CURRENT DERATING CURVE

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG. 3-TYPICAL REVERSE CHARACTERISTICS

Dimensions
DO-15

DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	Φ
C	0.026	0.034	0.70	0.90	Φ
D	1.000	—	25.4	—	