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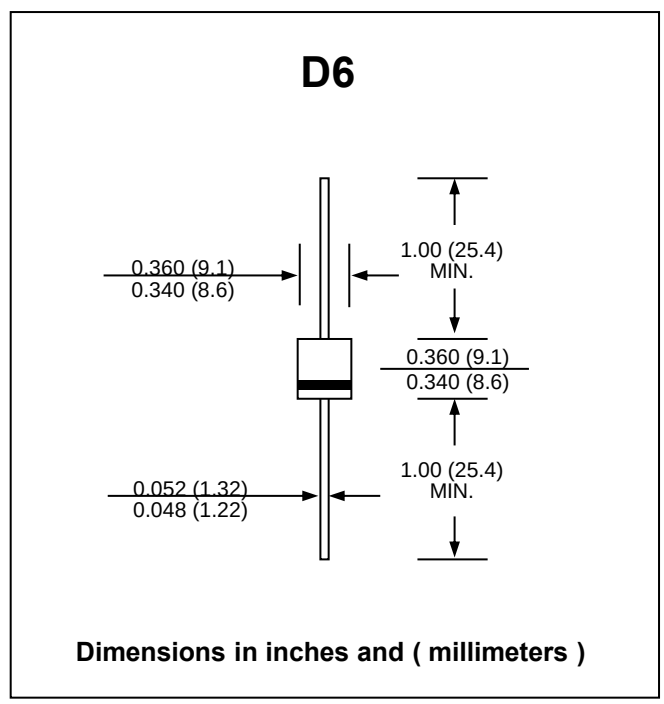
HVR2510K

HIGH VOLTAGE RECTIFIER DIODES

PRV : 10000 Volts
Io : 25 Amperes



FEATURES :
* Glass passivated chip
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Chip form
* Pb / RoHS Free

MECHANICAL DATA :
* Case : Void-free molded plastic body
* Epoxy : UL94V-0 rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 2.1 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	10000	V
Maximum RMS Voltage	V_{RMS}	7000	V
Maximum DC Blocking Voltage	V_{DC}	10000	V
Maximum Average Forward Current Tc = 75°C	$I_{F(AV)}$	25	A
Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	400	A
Maximum Forward Voltage at I_F = 25 Amps.	V_F	11	V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0	μA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	1.0	mA
Maximum Reverse Recovery Time (Note 1)	Trr	2.0	μs
Typical Junction Capacitance (Note 2)	C_J	30	pF

Notes : (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.
(2) Measured at 1.0 MHz and applied reverse Voltage of 4.0 VDC

RATING AND CHARACTERISTIC CURVES (HVR2510K)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

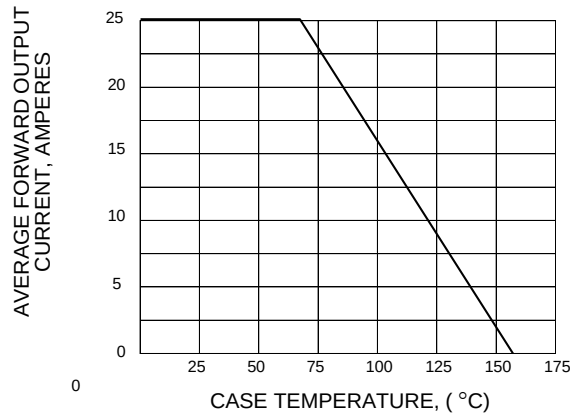


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

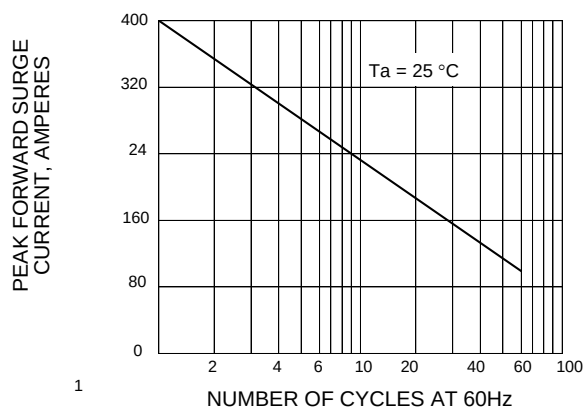


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

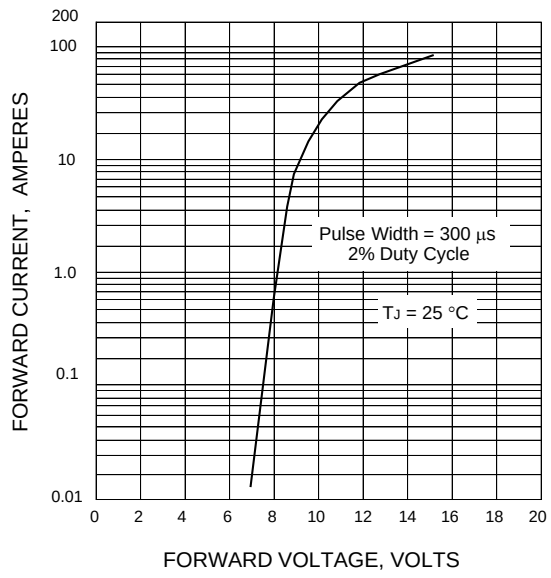


FIG 4 . - TYPICAL JUNCTION CAPACITANCE

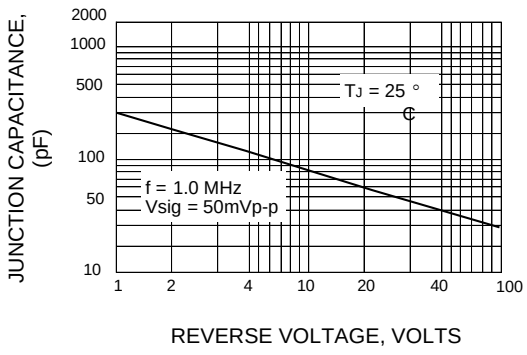


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS