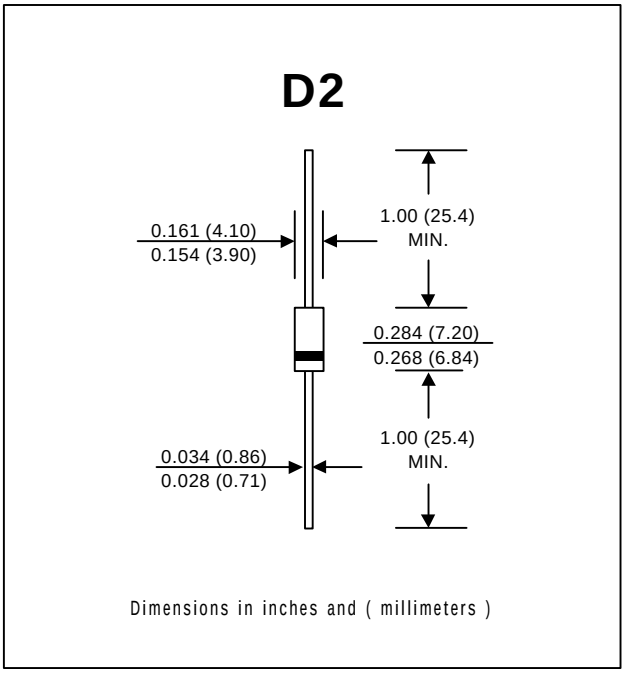
Certificate Number: Q10561

Certificate Number: E17276

ERC05-06 ~ ERC05-10

SILICON RECTIFIER DIODES

PRV : 600-1000 Volts
Io : 1.2 Amperes



FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Pb / RoHS Free

MECHANICAL DATA :

* Case : D2 Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.465 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 50 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	ERC05-06	ERC05-08	ERC05-10	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS voltage	V_{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	1.2			A
Maximum Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	100			A
Maximum Forward Voltage drop per Diode at I_F = 4.0 A	V_F	1.0			V
Maximum Repetitive Peak Reverse Current	I_{RRM}	10			µA
Junction Temperature Range	T_J	- 40 to + 140			°C
Storage Temperature Range	T_{STG}	- 40 to + 140			°C

RATING AND CHARACTERISTIC CURVES (ERC05-06 to ERC05-10)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

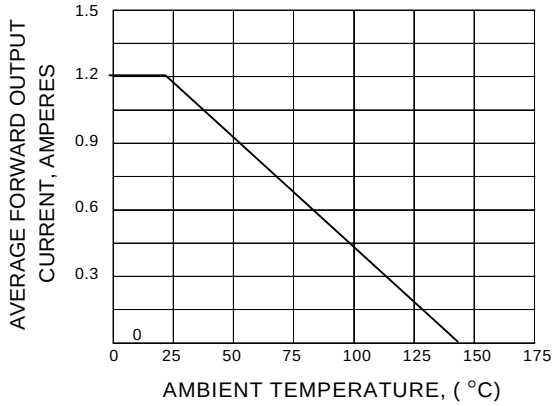


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

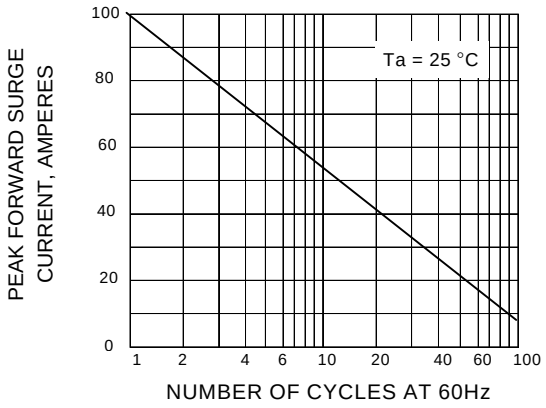


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

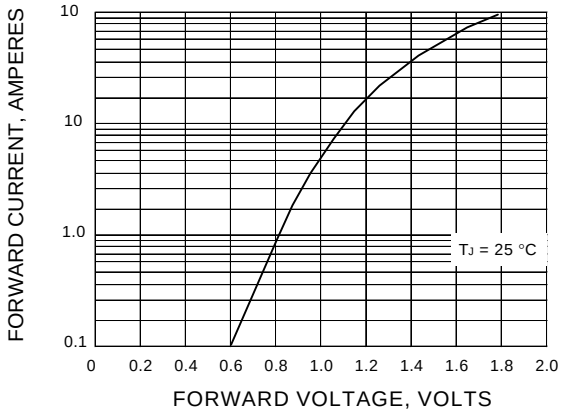
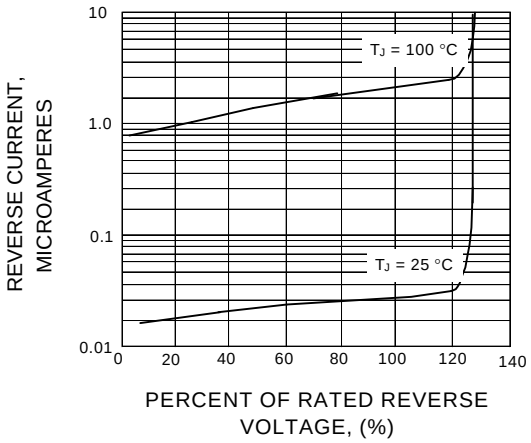



FIG.4 - TYPICAL REVERSE CHARACTERISTICS