

## 16kV 50mA HIGH VOLTAGE DIODES

ESJG05F16 is high reliability resin molded type high voltage diode in small size package which is sealed a multilayed mesa type silicon chip by epoxy resin.

**■ Features**

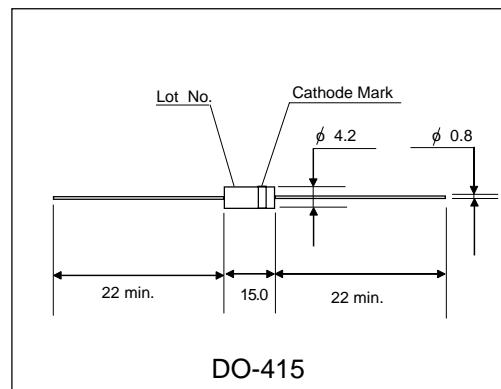
- High speed switching
- High Current
- High temperature resistance
- High reliability design
- High Voltage

**■ Applications**

- X light Power supply
- Laser
- Voltage doubler circuit
- Microwave emission power

**■ Maximum Ratings and Characteristics**

- Absolute Maximum Ratings

**■ Outline Drawings : mm****■ Cathode Mark**

Type	Mark
ESJG05F16	ESJG05F16

**Items****Symbols****Condition****ESJG05F16****Units**

Repetitive Peak Reverse Voltage	$V_{RRM}$		16	kV
Average Output Current	$I_o$	Ta=30°C, Resistive Load	50	mA
Surge Current	$I_{FSM}$		5.0	A <sub>peak</sub>
Junction Temperature	$T_j$		160	°C
Allowable Operation Case Temperature	$T_c$		160	°C
Storage Temperature	$T_{stg}$		-40 to +165	°C

- Electrical Characteristics (Ta=25°C Unless otherwise specified )

Items	Symbols	Conditions	ESJG05F16	Units
Maximum Forward Voltage Drop	$V_F$	at 25°C, $I_F = I_{F(AV)}$	24	V
Maximum Reverse Current	IR1	at 25°C, $V_R = V_{RRM}$	2.0	uA
	IR2	at 160°C, $V_R = V_{RRM}$	100	uA
Maximum Reverse Recovery Time	$T_{rr}$	at 25°C	80	nS
Junction Capacitance	$C_j$	at 25°C, $V_R=0V, f=1MHz$	--	pF